University of Alberta

Investigating Adolescent Perceptions of HIV Infection and Pregnancy, Fort Portal, Uganda, Africa

by

Sunita Chacko

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For my parents, Yohan and Sosamma Chacko
whose dedication, faith,
and perseverance
inspire me

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CHAPTER 1

Introduction

Often characterized as the epicentre of the worldwide pandemic, Africa is plagued with 70% of the world's HIV/AIDS burden, despite holding a mere 10% of the world's population (Logie, 2002). Perhaps one of the most progressive approaches to battling the epidemic has occurred in the small eastern African nation of Uganda.

Starting as early as 1986, the Ugandan government created a structured, multi-sectoral response to assisting its citizens in the fight against HIV/AIDS (NADC, 2002). While this pro-active approach is laudable, it is clear that complacency at this stage of progress would be highly detrimental. According to the National AIDS Documentation Centre, in an estimated population of 22 million, 700, 000 people living in Uganda are estimated to have HIV/AIDS. Nearly 80% of those infected with HIV are between the ages of 15-45 years, a most economically productive age group and often providers for the family. Repercussions of the disease burden have been further exacerbated by economic and educational disparity, as well as social and cultural limitations (NADC, 2002). The same factors that act to perpetuate the HIV infection rate are equally as affected by it. HIV/AIDS has touched every aspect of national life and development including individual behaviour, the roles and functions of the family, communities, the economy, and care and support systems. Of particular concern are the adolescent population, whose knowledge and understanding of sexuality at this critical stage has the potential to determine sexual practices over the course of their lifetime (Machel, 2001). Uganda has a predominantly young population, with the age group of 10-19 making up 23.3% of the population, and young people 10-24 comprising 33.5% of the population (World Bank, 2001). Adolescents make up about one third of the population of Uganda (AYA, 2002). Female adolescents are on average, eight times more likely to be infected than male adolescents. This is due not only to immaturity of the reproductive tract, but patriarchal values that are reflected in social and cultural practices which promote early sexual activity among young women, thus

exacerbating differences in risk due to gender (Kelly et al, 2003). A consistent association between older age of sexual partners and HIV prevalence among women aged 15-19 and 20-24 was found in a study in rural Uganda (Kelly et al, 2003). Given that the majority of women have sexual relations with men the same age or older, many young women are putting themselves at great risk.

Walking in hand with the scourge of HIV infection is the issue of teenage pregnancy among African youth. With over 70% of unmarried adolescents being sexually active, unplanned pregnancy is a high risk (Obi et al, 2002). While Uganda has made great strides to reduce teenage pregnancy rates (31% in 2001 compared to 43% in 1995), there is still a substantial need for family planning assistance directed towards adolescents (World Bank, 2001). Teenage pregnancy will invariably have effects on the mothers' schooling, employment, financial position and family household (Jewkes, et al, 2001). Parental and peer attitudes and influences, sexual guilt, and perceived and actual difficulties in obtaining contraceptives have all served to discourage adolescents from seeking protection (Adinma et al, 1999). As Manzini (2001) aptly points out, "adolescents are engaging in sexual activity at younger ages…in most cases, sexual debut is often unprotected, unguided, and uninformed (p. 44).

With the risks of HIV infection and unwanted pregnancy, adolescents in Uganda face a formidable double threat. Knowledge of condoms, STI's, and HIV/AIDS have all been measured as high in past surveys (AYA, 2002), however, this knowledge does not seem to be practiced, as the same surveys measure adolescents as making up over 50% of new HIV infections in 2001, and adolescents 15-19 years old accounting for 31% of the pregnancies for the same year. (AYA, 2002). While attention has been focused on adolescents' knowledge, attitudes and behaviours related to HIV infection, as well as knowledge and attitudes toward adolescent pregnancy, it is not known whether the perceived risks of HIV infection and pregnancy are related in the minds of adolescents. This is reflected in statistical data which reports that in 1991, 33% of pregnant 15-19 year olds in Fort Portal were HIV positive (Kilian et al, 199l). Despite the decrease in this HIV

infected pregnancy rate over the last few years, in many areas, STD/HIV prevention services are still offered in isolation from reproductive health or family planning services, and the potential for the problem continues to exist.. It is believed that adolescents might well harbor misconceptions of the role of contraceptives in HIV prevention and in the relationship between HIV infection and pregnancy or childbirth.

The purpose of this study was to explore adolescent risk perceptions of both HIV and pregnancy, as well as how they view the relationship between HIV infection and pregnancy. Part of this investigation entails looking at how their perceptions are influenced by broader factors such as their own knowledge as well as social norms and values in the Kabarole District in Uganda. The study will also explore adolescent perceptions of HIV prevention services and family planning services.

Specifically, an exploratory, qualitative study of boys and girls between the ages of 14 and 18 in selected schools in Fort Portal, Uganda was carried out. Data were collected through focus group discussions with secondary school students, as well as key informant interviews with health professionals who provide family planning and HIV preventive services in the region.

CHAPTER 2

Background

Uganda and the Kabarole District

Uganda is a landlocked country in the heart of sub-Saharan Africa bordering Sudan, the Congo, Kenya and Rwanda. It is made up of approximately 24 million people of four different ethnic origins –the Bantus, Nilotics, NiloHamitics, and Sudanics, with each group consisting of various tribes. (Government of Uganda, 2003). Uganda gained independence from British Rule in 1962 (Government of Uganda, 2003). While the official language of the country is considered English, other languages such as Swahili and Luganda are also spoken. The national literacy rate is estimated to be 61%. Current life expectancy is estimated at 45.3 for males and 47.7 for females however these figures drop by an estimated 8 years when considering healthy life expectancy (36.2 males, 39.8 for females) (WHO, 2003). Uganda's population grew at an average annual growth rate of 3.4% between 1991 and 2002 (UBOS, 2003). This high rate of population growth is attributable to the high fertility rate of 6.9 children per woman, and the early age at which women begin child bearing (UBOS, 2003). Total health expenditure is estimated to be 3.9% of the entire GDP (WHO, 2003). The structure of the education system in Uganda has been in place since the early 1960s. It consists of seven years of primary education followed by the lower secondary cycle of four years and the upper secondary cycle of two years, after which there are three to five years of university studies. Since the introduction of Universal Primary Education in 1997, the primary school section has experienced a steady increase in number of schools, teachers, and students (UBOS, 2003). While it is uncertain as to whether this trend has extended into secondary school, it is assumed that given the necessary school fees, lack of interest, and family responsibility (UBOS, 2003), that young people face greater barriers to continuing their schooling as they grow older.

The Kabarole District is split into 3 administrative districts of Kyenjojo, Kamwenge, and Kabarole. Because of its location in the south west of the country, amidst the fertile land

surrounding the Rwenzori mountains, the primary economic activity of the Kabarole district is agriculture. Kabarole has an estimated population of 497, 422 (UDIP, 2003). Kabarole has a fertility rate of 8.03 and a total literacy rate of 49% (O'Connor, 1999). The most prominent ethnic groups include the Batooro, Bakiga, Bakonyo and Bamba. The primary languages besides English include Rutooro, Rukiga, and Runyankole (UDIP, 2003). There are three hospitals in the Kabarole district, all of which are government aided. There are also 119 primary schools and 24 secondary schools in this region. The District headquarters are located in Fort Portal, about 300 kilometres away from the capital city of Kampala.

Literature Review

In the last decade, adolescents have become a group of great interest to researchers in public health. Much of the research deals with either teenage pregnancy, or teenage HIV infection, neglecting to address the interrelatedness of these two health issues. Very few of the studies reviewed, reflected an obvious link between HIV infection and teenage pregnancy as issues that could be simultaneously addressed, suggesting that this area could benefit from increased attention. It is important to address the paucity of concurrent research into both topics, given that adolescents must begin to not only associate the two occurrences in their minds, but also be vigilant and aware of the multiple risks involved in their sexual behaviour.

A literature review was conducted by searching the EMBASE and Medline databases, using the key words of Uganda, sub-Saharan Africa, adolescent, reproductive health, gender, HIV/AIDS, teenage pregnancy, adolescent pregnancy, sexual behaviour, sexuality, human relations, interpersonal communication, powerlessness, embarrassment, attitude, and sociocultural factors. Other websites searched included the World Health Organization website, Government of Uganda website, National AIDS Documentation website, and Worldbank website. While a number of articles dealt with the psychosocial factors that affect adolescent sexual decisions and actions, it was difficult to find articles that explored pregnancy beyond its immediate clinical

risks and considered the social and cultural consequences of early pregnancy in a comprehensive manner. Despite this fact, many articles were found that capture the context within which adolescents live, exploring not only their sexual behaviours, but potential determinants of sexual behaviour including social, cultural, and economic factors.

The literature reviewed is mainly restricted to sub-Saharan Africa, but not necessarily Uganda. While information from other sub-Saharan African countries may not apply precisely to the Ugandan context, it is assumed that for the most part, they may be relevant. However, some of the norms, values and behaviours in relation to sexual health in Uganda may differ from what has been found in other parts of sub-Saharan Africa.

A time of transition: exploring adolescence.

Adolescence is a time when boys gain autonomy, mobility, and power, while girls are denied or relinquish these characteristics (Harrison et al, 2001). Machel (p. 82, 2001) states that "adolescence is considered a critical stage in the reinforcement and consolidation of gender roles and perceptions of a person's identity in relation to others" and that "understanding of sexuality and sexual behaviours adopted in adolescence are likely to remain for the rest of a person's life." Adolescents also experience a number of conflicting pressures, being faced with upholding an adult (or parental) norm that preaches sexual abstinence, while attempting to belong within peer groups that glamorize premarital and unsafe sex (Nzioka, 2001). Clearly, the social context in which young Ugandans live is rich with factors that influence subsequent health behaviours and decisions. Adolescents need to be addressed as individuals with sexual needs and rights by the larger society (Nzioka, 2001). In conducting a review of the literature, Macphail and Campbell (2001) determined that a great deal of research refers to adolescents as a homogenous group, making wide generalizations that do not paint a realistic portrait of the range of adolescent experiences. This research that neglects the diversity of youth then influences policies resulting in a divide between what is offered to adolescents and what is truly required (2001).

Nyanzi et al (2000) point to the tension that exists for females between the "traditional ideal of female chastity and submissiveness, and the modern image of sexual freedom" (p. 83). According to their study, for Ugandan adolescents, multiple partnerships are highly valued, with risky behaviours forming part of an ideal of sophistication.

Joffe and Bettega (2003) cite factors that affect the spread of AIDS among adolescents including: ignorance of knowledge among youth; poverty; gender (and the exchange of sex for money); a lack of control over sexual desire; peer pressure (especially among boys to signal adequacy as men); modern day film; and vindictive behaviour.

In many instances, adolescents feel that they are "physically and psychologically invulnerable" and thus engage in risky behaviours (Adih and Alexander, 1999). In the case of HIV infection, they may also be unable to perceive their actions as risky given the long delay between infection and onset of disease (Venier et al, 1998). Adolescents in Uganda live in a time of sociocultural transition where traditional practices that formerly limited sexual experience are breaking down. Traditionally, the family played an important in role in orienting young people to sexual behaviours. This role has since dissipated and more and more adolescents are relying on their peers for information (World Bank, 2001). Changes in traditional ways of life also lead to increased urbanisation, and new opportunities for employment and education, along with increasing influence of media, and peers, and greater sexual freedom (Bayley, 2003). Adolescence is a time when behaviour can be influenced before it becomes established, yet a number of issues on a variety of levels must be overcome, including the information upon which adolescents base their sexual decisions, the negative attitudes of adults and health workers which adolescents must endure, and the inability for young women to adequately negotiate sexual behaviour (Bailey, 2003). Adinma et al point out that in the present day, adolescents are sexually exposed at an early age, due to natural curiosity, as well as larger factors such as sexual permissiveness of society, reduced parental monitoring due to work pressure, and increasing independence (2000).

It seems that adolescents in Uganda and throughout sub Saharan Africa lack knowledge in a number of areas, including reproductive biology, risky sexual activities, how and when pregnancy occurs, maturation processes, and negotiating in sexual relationships (World Bank, 2001). However, programs must go beyond information dissemination, to incorporate forms and processes for behaviour action (World Bank, 2001).

Risks of teenage pregnancy.

The many consequences of early pregnancy largely fall upon the female. Along with health consequences, such as receiving inadequate health care, facing health risks from pregnancy at a young age, and enduring illicit abortion, there are also social consequences, which include expulsion from school or simply dropping out to care for the child (Nzioka, 2001), and having to endure economic hardship (Macphail and Campbell, 2001, Kayaa et al, 2002). Economic burden falls on both the women and her family, and in the likely event that the woman cannot complete her schooling, the chance is lost for her to improve her societal position, and gain economic stability (Vundule et al, 2001). In a study in Mbale District in Uganda, Agyei et al (1994) point to the fact that the number of abortions is likely underreported because of the respondent's reluctance to report an illegal act. This is further echoed in literature a decade later by Silberschmidt and Rasch (2001) who point out that accurate reporting is hindered by the sensitive nature of the issue, and the fact that community surveys produce large underestimates. In their study in Dar Es Salaam, Tanzania, they found that among adolescents, "…abortion was used as a contraceptive method, because cultural and practical barriers—including access to contraception--present greater obstacles (shame) than the risk (fear) of having an abortion." (Silberschmidt and Rasch, p. 1821, 2001). Illegal abortions are connected with high morbidity, as most are performed in an unsafe manner, by unskilled individuals (Silberschmidt and Rasch, 2001). For women who continue with a pregnancy, attendance at antenatal clinics is often in the late stages

of pregnancy which exposes pregnant teens to health risks such as hypertension and eclampsia (Vundule et al, 2001).

Overcoming societal barriers.

Adolescents face a number of barriers in society when attempting to practice safe sexual behaviour. For instance, parents' disapproval of youth sexual activity is cited as a reason why condoms are not used at all, where sexual acts were often illicit and hurried, and putting on a condom was seen as a "waste of precious time" (Macphail and Campbell, 2001).

South African teenagers rarely reported going to their family members for sexual information. Teenagers were more likely to be advised against contraceptive use by their mothers, than given sexual information. (Vundule et al, 2001). The research however did not elaborate on the reasons that the mother denied her daughter sexual information. Similarly, few teenagers felt that speaking to their parents about sex was "easy". (Vundule et al, 2001). De Bruyn (1992) states that "in many societies, sex is not considered a fit topic for discussion between men and women or parents and children" (p. 255), making changing the norm even more difficult. In Zimbabwe, society believes that youth who talk about sex are more likely to be sexually active and talking about sex serves to arouse youth. Youth confirmed this belief in study results, showing that talking about sex did in fact arouse them, however, they still believed that schools should talk about how to avoid intercourse (Schatz and Dvimbo, 2001).

Even when adolescents feel comfortable in using condoms, there is a great deal of discomfort in requesting condoms at health clinics or hospitals due to embarrassment (Machel, 2001; Macphail and Campbell, 2001). In a study conducted in rural Uganda, Kinsman et al (2001) found that boys and girls had relatively high levels of knowledge about condoms, and had relatively positive attitudes about them as well, however they expressed shyness both in discussing and accessing them. In Kenya, Nzioka (2001) found that while boys felt the need to fit in to the male idea of sexual prowess, and to boast about sexual conquests, they also felt

uncomfortable discussing sexual topics with adults, and were embarrassed to get condoms from places where they might be known, since they were aware that their sexual activity was not condoned. Other studies repeat these findings stating that barriers such as negative community attitudes and perceptions, the ideas that nurses do not know enough about adolescent issues, youth embarrassment of being seen in health facilities, or fear of confidentiality being breached, inhibit adolescents from seeking out services, (Mmari and Magnani 2003; Langhaug et al, 2003). An additional barrier was the fact that certain clinics are not open outside of school hours, making it difficult for students to access assistance (Langhaug et al, 2003). In some instances, the health professional will look at the adolescent in a parental role rather than in a professional role, and react accordingly, often with anger (Langhaug et al, 2003). Privacy is betrayed through physical space, whereby room doors are left open, desks are near waiting areas, etc. thus increasing adolescent's discomfort and fear of being overheard (Langhaug et al, 2003).

Adolescence is not always recognized as a legitimate transition between childhood and adulthood and adults belittle the fact that adolescents deserve privacy, confidentiality, and autonomy. This is further seen in Zimbabwean nurses who report that they only offer contraception after the young person has become sexually active, because having contraception as they contemplate sexual activity will only encourage them to carry it out (Langhaug et al, 2003). This leaves young people exposed to risks of pregnancy and STI's in their initial sexual encounters.

Trust of those providing health information is a critical issue. Given the skepticism that young people feel towards using contraceptives, as well as the potential embarrassment they risk in seeking out health information or contraception, it is important to include them in the development and delivery of education materials (Brieger et al, 2001). Additionally seeking out individuals in the community with whom adolescents have a comfortable rapport will assist in making the message of protection more acceptable (Brieger et al, 2000).

There is a prevailing misconception in many areas of sub-Saharan Africa that family planning services are for married adults (Mmari and Magnani, 2003). In a study conducted in Lusaka, Zambia, an evaluation was done to assess whether youth friendly services increased service use by adolescents in the community. Contrary to what might be expected, it was not an increase in youth friendly services that led to increased service use (Mmari and Magnani, 2003). Rather it was the level of community acceptance of services for adolescents that determined whether or not they were well used, making social and community-level factors an important determinant of service use levels (Mmari and Magnani, 2003).

Health services are largely inaccessible to adolescents due not only to parental and health workers attitudes, but also community and religious attitudes as well (World Bank, 2001). In addition, health services are plagued by poor quality, inadequate equipment, supplies such as condoms, and space to be responsive to young people's specific needs. While Uganda has waived user charges in its health centres, these issues remain as barriers (World Bank, 2001).

Women and power.

One of the dominant themes emerging from an analysis of women's issues in sub-Saharan Africa is that of powerlessness. This concept often manifests itself in the form of violence against women, an act that is condoned in many parts of Africa (Kiragu, 1996). Gender violence in intimate relationships occurs so regularly that it has come to be perceived as normative, and is accepted rather than challenged (Ackermann and de Klerk, 2002). Violence is not specific to marital relationships and can occur even in earlier stages of relationships (Ackermann and De Klerk, 2002). Some studies have indicated that as many as 30% of young African girls' first sexual encounters are forced (Ackermann and de Klerk, 2002). Jewkes reports that forced sexual intercourse and hesitancy to confront unfaithful partners are strongly associated with pregnancy among adolescents (Jewkes, et al, 2001). Forced intercourse denies the female

control over the situation and negates her ability to negotiate contraceptive use (Manzini, 2001, Maman et al, 2000).

There is a fear in asking male partners to use condoms because it is akin to implying wrongdoing by the woman. "Women who attempt to introduce condoms into a relationship are often perceived by males as overly prepared for sex, not trusting of their partner's fidelity, unfaithful themselves, or even HIV infected" (Giffin and Lowndes, 1999). Understanding relationships in the context of societal norms and values shows that power disparities are learned by the time of sexual introduction and that negotiating protection becomes all the more difficult when women do not have any control or authority in decision making (Machel, 2001).

One study showed that girls would rather try to refuse sex than negotiate condom use (Harrison et al, 2001). Given the unlikelihood that refusing sex would be successful, it is more likely that these young girls would be exposed to possible HIV infection.

The adolescent relationship and perceptions of contraceptives.

A large amount of the literature on adolescents focuses on adolescent relationships, and the immediate interpersonal context in which contraceptive use is determined. Specifically, much of the literature discusses condom use, perceptions of condoms, and negotiation of condom use. This is most likely due to the fact that condoms are a common form of contraceptive in developing countries, especially among young people.

It has been documented that sexual activities generally begin at age 16 in Uganda although many adolescents begin as early as 14 years. By the age of 15, 30% of women have had sexual intercourse, and by age 18, this proportion increases to 72% (Worldbank, 2001). In many instances in sub Saharan Africa, adolescent relationships reflect those of adults, with males seeking out multiple partnerships and women being enticed by gifts, monetary and otherwise (Nyanzi, 2000). Gender roles are quite clearly defined where boys are in large part the initiators of sexual relations. In fact, boys perceive girls who would suggest sex to a boy as being "loose"

or "over-sexed" (Nyanzi et al, 2000). As mentioned earlier, violence, power dynamic and monetary gain all play a role in sexual negotiations between males and females (Nyanzi, et al, 2001, Jewkes et al, 2001). Brieger et al (2001) report that "non or low use of contraceptives may be related to social norms and stigma associated with premarital sex. "Young people often feel a great deal of pressure to have sex (from interaction with peer groups) but no support or encouragement to use contraceptives, since their use implies premarital sexual activity, which is not socially approved of" (p. 437).

Studies in Uganda have shown that adolescents generally have a strong knowledge base of contraceptives (Agyei et al, 1994, Worldbank, 2001). However, for the most part, this knowledge is not translated into practice for many teenagers. One study reports the main reasons for not using contraceptives that were cited by adolescents were "they could not get contraceptives, contraceptives were considered unsafe, and they did not know about contraceptives" (Agyei et al, 1994). Studies in South Africa have pointed out fear of losing one's partner as a barrier to using contraceptives (Jewkes et al, 2001). Nyanzi et al (2000) point to the fact that reported condom use may likely be a result of experimental rather than systematic use and that condoms were generally not acceptable in his study group.

In many instances, young women's motivation for engaging in sexual intercourse is derived from love, intimacy, and commitment to have a relationship (Macphail and Campbell, 2001). In addition, various reasons emerge for engaging in sexual behaviour, including fun, companionship, love, pleasure, needing money, and coercion. (Machel, 2001). Ugandan adolescents also cited the gain of sexual experience, to "score points" among peers, and gain an image of sophistication (Nyanzi et al, 2000).

Condom use is associated with "multiple sexual partners, distrust, and disease" (Machel, 2001). Macphail and Campbell (2001) expand on the idea of condoms as a sign of mistrust, and point out that in steady relationships, the adolescents they studied felt that condoms were unnecessary. However, the adolescents' assessment of trustworthiness was not based on factual

information such as a negative HIV test or sexual history. Rather it was based on subjective measures such as appearance and reputation (2001). Additionally, young women who carried condoms were seen as promiscuous and were subject to gossip and rumors (Macphail and Campbell, 2001).

In a study by Harrison et al (2001), a dichotomy emerged among male and female adolescent behaviours, with boys perceiving less risk of HIV and pregnancy and being more likely to use condoms, and girls fearing pregnancy and HIV infection, but not using condoms and preferring to delay sexual relationships. Girls were aware of pregnancy and HIV infection as risks, but did not demonstrate similar awareness about condoms and their use. Males did not exhibit as much concern over pregnancy as did females, viewing pregnancy prevention as the woman's responsibility.

While some studies identify women as having the responsibility to ensure they use protection, other studies point to the fact that there are restrictions on the female's ability to protect themselves. In Nzioka's (2001) study in Kenya with adolescents, a few boys were noted to deem girls who became pregnant as "stupid ones because the clever ones know how to protect themselves". Thus while it was acceptable for a girl to engage in intercourse, in the event of pregnancy, the blame was placed squarely on the female (Nzioka, 2001). In their study of Zambian adolescents, Joffe and Bettega state that girls are seen as the ones who introduce the disease to boys because of sexual interaction with older men who are already infected. Therefore boys remain unblamed and innocent, "entities that are threatened by danger, but do not generate it." (Joffe and Bettega, p 628, 2003).

While both sexes in the Harrison et al study (2001) viewed condoms positively, they also agreed that it was difficult for girls to initiate condom use. This is echoed in other studies where girls assume that boys should and will take initiative because they are the ones believed to have the "sexual needs" (Nyanzi et al, 2000). Thus condoms are framed within a male domain, with woman largely relegated to the role of reactor in sexual scenarios. Sexual practices are carried out

in an environment where protection is not an assumed part of the female role. Rather, it is something that has to be negotiated by females, often with male partners older than themselves, with whom they feel unequal in regard to decision making (Machel, 2001).

Given that subordination is a characteristic feature of sexual relationships, it is difficult for women to assert themselves and negotiate with their partners in sexual matters. In Uganda, women who suggest condom use risk being accused of not only promiscuity and unfaithfulness, but of being infected as well (De Bruyn, 1992). In addition, women did not trust men, stating that they put holes in condoms, an act which men actually reported doing (Pool et al, 2000). In a study conducted in south west Uganda, Green et al (2001) provided women with vaginal contraceptives such as the female condom, foaming tablets, contraceptive sponge, Delfen foam, film, and gel. These products were chosen given their relative ability to be used in secret without the male knowing, thus increasing the women's control in sexual situations. It is interesting to note however, that as the study continued over five months, the number of women who kept it secret from their partner consistently declined. It is reported that many of the women felt a duty to tell their partner that they were using the products. Green et al (2001), state that while "Some telling may have taken place in the context of a caring, sexual relationship, underpinning the relationship is women's lack of empowerment which propels them to divulge information to their male partners" (p 595).

Schatz and Kvimbo (2001) conducted a study in Zimbabwe that gives insight into the views that young women and men hold in regard to one another when negotiating sexual relations. For instance, when males talked about females, shyness was considered a sign of submission. Also, it was thought that schoolgirls had sex because of what they stood to gain materially, an idea largely noted in many other studies (Nyanzi et al, 2000; Macphail and Campbell, 2001; Ackermann and de Klerk, 2002). Males felt that most girls did not know how to say no to sex and that there is a great deal of peer pressure amongst males to have sex. Females on the other hand felt that their shyness was a reflection of their role in a patriarchal society, and

that material gain was not the only reason to engage in intercourse. Students agreed on the fact that girls did not know how to say no to sex, and that boys will tell lies to convince a girl to engage in sex.

Harrison (2001) suggest that poor preventive practices are due to limited comfort with condom use, rejection of abstinence or its negotiation, or limited comprehension of other safe sex practices. Nzioka (2001) reports condom use among boys to be "infrequent and erratic" (p 114). Along with factors such as perceived ineffectiveness, as well as cost, many of the boys he interviewed viewed condoms as "acceptable for use only by adults, bad boys, boys who love sex, or promiscuous boys." Some boys even felt that free condoms could be laced with HIV, an idea heard not only in Kenya, but in other areas of East Africa as well. Condoms were also a sign of physical and moral contamination, reflective of a bad sexual history (Nzioka, 2001). De Bruyn (1992) echoes these statements and further states that in many countries, popular analogies characterize condoms akin to "taking a shower with a raincoat on", or "eating a candy with a wrapper still on" (p. 256). In a study conducted in Tanzania, secondary school students believed that condoms reduce the sensation of sex, condoms are not safe, condoms can bring disease, that their sexual partners hate condoms, and that condoms had the potential to slip into the girl's vagina during sex (Maswanya et al, 1999). A study in Kenya cited trust of partner to be the most important reason for respondents never to use a condom. Ackermann and de Klerk cited young boys as having two reasons for not using condoms—the first was physical as it was felt that condoms reduced pleasure, the second was attitudinal, based on a perception that only prostitutes used condoms.

In a recent study in South Africa, 85% of the students participants agreed that it is important to use condoms every time, however of these same students, only 46.2% reported actually using a condom every time, demarcating a clear boundary between theory and practice (James et al, 2004). This study further reflected that while adolescents had a favorable view

toward condom use, actual use and confidence on how to use condoms was low among both male and female students (James et al, 2004).

In a study of contraceptive use in Uganda, adolescents cited condoms, pill, and rhythm method as being used, with urban youth using more reliable methods, and rural youth using more unreliable methods (such as rhythm method) (Agyei et al, 1990). Safe period has also been listed as a method used in sub Saharan African countries (Vundule et al, 2001), The same study records that while contraceptive knowledge is quite high, actual use is quite low. Many more young adults surveyed were sexually active than approve of premarital sexual activity, and more approve of use of contraceptives by sexually active unmarried young adults than actually use them. These are stark contradictions. Female focus group members in West Africa, doubted the protective ability of contraceptives stating that "contraceptives could cause infertility, condoms could break and become lodged inside the body, and the need to demonstrate fertility before marriage" (Brieger et al, 2001). Many issues act against contraceptive use including emotional conflict, sexual guilt, difficulty in obtaining contraception, and high default rate (Adinma 1999). Venier et al (1998) highlight the importance of addressing the anxiety that arises in sexual interactions between adolescents. Beyond increasing knowledge and awareness, there is need to address the greater social skills in safe sex interactions (Venier et al, 1998) Behaviour change involves increasing an individual's ability to exert personal control over a given situation (Venier et al, 1998). Interestingly enough, it seems there is a fine balance between addressing anxiety and overplaying it. In countries where HIV has been a social issue for a long time, anxiety around the disease seems to be lessened (Venier et al, 1998), suggesting that in certain countries, an emerging issue may in fact be complacency among adolescents.

Other determinants of condom use include perceived benefits and barriers of condom use, perceived susceptibility to AIDS, perceived self-efficacy to use or have a partner use a condom, and perceived social support for condom use (Adih and Alexander, 1999). Given that in many cases, adolescents do not feel comfortable obtaining condoms from family planning clinics,

drugstores, hospitals, or doctor's offices, negative views of condom use must be diminished and condoms must be framed as a sign of responsibility rather than promiscuity (Adih and Alexander, 1999). In addition to general issues that exist among adolescent associated with accessing contraceptives, there are gender issues which arise. When surveyed, 47.6% of a group of Zimbabwean students believed that an unmarried girl using family planning services is immoral, while 58.3% of the group felt that a school aged boy who used condoms was sexually responsible (Schatz and Dzvimbo, 2001). These statistics suggest that greater societal barriers exist for young women to access contraceptives than for young men.

The type of relationship in which an adolescent is involved also has influence on whether or not protection is used. When considering pregnancy, it is important to go beyond the concept of first intercourse to explore the role of contraceptives in more serious relationships as both partners become more committed and contraceptive use becomes more erratic, or stops altogether (Manzini, 2001, Jewkes et al, 2001). An American based study by Ellen et al (1996), suggests that condom use is highest with anonymous partners, less frequent with casual partners, and least often used with steady partners. The same article also points out that there is a positive association between being able to discuss use of condoms with partners and reported use among adolescents, which points to the importance of negotiation and communication skills. (Ellen et al, 1996).

The economics of sexuality.

Women's subordinate role in African society is well documented in published literature. A patriarchal value system is strongly entrenched throughout African nations, with the man being the dominant figure and the woman relying on him as provider (Machel, 2001). Faced with financial difficulties, parents will often sacrifice the female's education in exchange for that of the male's, leaving the female child without basic education (Mill and Anarfi, 2002). Girls often have to give up their education to assist the family with activities such as "trading", which

involves buying food or household goods at wholesale prices and then selling them for a profit at the roadside or in the market (Mill and Anarfi, 2002). The concept of material support in exchange for sexual favors is well documented in the literature. Sexual behaviour is intimately related to the issue of poverty. Casual sex for money and gifts is widely accepted as a coping strategy for dealing with poverty rather than engaging in commercial sex work. Nyanzi et al (2000), in a study among adolescents in southwestern Uganda, write that "girls have to be explicit enough to get a good deal; if they are too explicit they will be stigmatized as loose, but they are not interested in money, they may be suspected of wanting to spread HIV." Interestingly enough, adolescents in this study identified a relationship as being sexual or not based on the exchange of money. Boys could give girls any gift other than money, but when money began to be exchanged, it was taken as a sign of sexual interest on the boys part (Nyanzi et al, 2000).

Girls have been known to engage in sexual relationships for favors as simple as a ride home from school, gifts, subsistence cash, clothes, shoes, underwear, food, or cosmetics (Nyanzi et al, 2000; Macphail and Campbell, 2001; Ackermann and de Klerk, 2002). Thus money obtained in sexual relations is used to pay for things that parents cannot afford, or do not deem necessary (Nyanzi, et al, 2000). Silberschmidt and Rasch (2001) report that many parents are aware of their daughter's activities, but turn a blind eye because in many cases it shifts financial burden away from them.

A common practice seen in many African societies is that of the "sugar-daddy" phenomenon, whereby older men pursue sexual relationships with younger women (Machel, 2001, Mill and Anarfi, 2002; Silberschmidt and Rasch, 2001). This type of relationship allows the women financial stability and material gains, and is viewed favourably by men because they feel there is less likelihood of contracting HIV with a younger woman (Mill and Anarfi, 2002). The practice of women marrying early to an older man to alleviate financial deprivation, results in a peak prevalence of HIV infection at an earlier age for women. A woman's probability of contracting HIV increases dramatically as the age of first intercourse decreases (Manzini, 2000).

Young brides lose any potential to pursue an education, find better employment, and gain economic independence (De Bruyn, 1992). Gender and its interplay with the expectations of women in society lead to differential access to finance, education, and ultimately power and control of their own bodies.

Machel (2001) introduces the concept of class as contributing to sexual negotiation, pointing out that middle class women in Mozambique had fewer sexual partners, used condoms more often and were more assertive than similar women in the working class. Working class women were more likely to accept the status quo and refrain from assertiveness. Because working class women were more dependent on partners for material needs, their "bargaining power in relation to safe sexual behaviour" was compromised (p.82). Forty-nine percent of the young women interviewed in the working class school felt obliged to have sex whenever their partners wanted to, as compared to only 6% from the middle class school. (Machel). Given these facts, it is clear that poverty, and female poverty specifically, can increase young women's risk of infection and other adverse outcomes (Ackermann and de Klerk, 2002).

The role of education.

Both general education and sexual education within the larger school curriculum plays an important role in the lives of adolescents. The relationship between education and prevention of teenage pregnancy and HIV infection has been documented in the literature. Access to education on sexual topics has been seriously neglected in many sub-Saharan African countries because of fear of encouraging "immoral or unrestrained" sexual activity (Silberschmidt and Rasch, 2001). Adinma et al (1999) suggest that instruction on contraception as part of the academic curriculum at all educational levels would improve contraceptive knowledge and assist in prevention of teenage pregnancy They call for a "reorientation of parents attitude toward contraception" in addition to comprehensive educational programs that deal with basics such as the anatomy and

physiology of reproduction, highlights the value of virginity and abstinence, teaches safe sex, and warns about the adverse consequences of unsafe sexual intercourse.

There appears to be conflicting evidence about the relationship between educational attainment and the risk of HIV infection among adolescents. In a systematic review of studies conducted in developing countries regarding educational attainment and HIV infection, Hargreaves and Glynn (2002) note that in the early nineties, specifically in Fort Portal, Uganda, increased education was related with increased risk of infection among the 25-49 age group, but not the 15-24 age group. The authors cite various studies which suggest that increased education leads to disposable income, increased leisure time, increased ability to travel, and increased opportunity to pay for commercial sex workers. Additionally, while the relationship between socioeconomic status and risk of exposure to HIV may apply specifically to men, women are placed at risk because they tend to marry within their socioeconomic group and then are faced with the increased risk due to their husband's behaviour (Hargreaves and Glynn, 2002). It is noted in this study however, that more recent data within Uganda suggests that there is a shift away from the association between risk of exposure to HIV and educational attainment. Also, this study does not account for health education specifically, only general education. If one considers health education, Nwokocha and Nwakoby (2002), report a drop in prevalence of HIV from over 35% to below 20% between 1992 and 1996 in Uganda attributing this decrease to the presence of health education, emphasizing sex education in the school curriculum. Kilian et al (1999) report that in secondary schools in Kabarole District, high levels of knowledge and positive attitudes about HIV prevention have been recorded and that decline in HIV prevalence between 1991 and 1997 was strongest among young women with secondary education. Additionally in Kabarole district, there has been an increase from 43% in 1994 to 58% in 1997 of secondary school students who ever used condoms. (1999). In Lusaka, Zambia, Magnani et al (2002) found that those youth who completed more years of schooling were less likely to have had sex, current school attendance was associated with a lower probability of ever having sex

among young females, and a lower number of lifetime sexual partners among both genders. This study also showed that "levels of education were positively associated with consistent condom use among both males and females, a higher probability of having used condoms at last sex, and consistent use with the most recent partner (Magnani et al, p. 82, 2002)." These results are repeated in a study in Arusha, Tanzania, where condom use in the last sexual encounter was associated with higher level of education, delayed sexual debut, prolonged duration of dating during intercourse, and having only one sex partner (Lugoe and Klepp, 1996). Those individuals who engaged in sexual activity early on used condoms the least, a possible sign that they have inadequate knowledge and are perhaps not mature enough to deal with sexual activity (Lugoe and Klepp, 1996). In addition to school, parents and participation in extracurricular activities were significant factors in determining the practice of safe sexual intercourse (Betts et al, 2003).

Bajos and Marquet (2000) are able to capture the significance of elevating women's position in society when they write "…differences in men's and women's reports of their sexual and preventive behaviours are the smallest in the countries that have achieved the most gender equality, i.e where women's social status is the highest--the higher their social status, the more women are able to stray from their traditional social roles in the area of sexuality…" (p. 1544). Given education's role in determining social status, increasing educational opportunities for women raises women's level of assertiveness and sexual autonomy. Additionally it is important to influence sexual norms so that it is socially acceptable for women to ask that condoms be used and engage in preventative behaviours (Bajos and Marquet, 2000).

Information sources among youth.

Cited sources of information on sexuality for young people in South Africa include media such as newspapers, magazines, or television, as well as clinics (James et al, 2004). Family was reported as the least used source of information while both males and females communicated mainly with friends on sensitive issues. Brieger et al (2001), report that young people in West

Africa felt most comfortable discussing sexual matters with peers, followed by health care workers.

Also important are the influences of Western values, as relayed through magazines, film, and television. These media forms emphasize promiscuity over monogamy (Nyanzi et al, 2000; Kinsman et al, 2000). Nwokocha and Nwakoby (2002) offer a different interpretation of the media exposure of adolescents. They suggest that while the media has achieved its goals of creating awareness about HIV, they have in the process, created panic among their audience, through the sheer amount of information that is being passed. As the authors state, "The result is that individuals get confused and switch off, not wanting to hear any more of what is now seen as propaganda and yet they are basically ignorant of essential details of the disease" (Nwokocha and Nwakoby, p. 95, 2002).

Value of fertility.

Research questions must attempt to gauge the value that is placed on fertility among Ugandan youth. Jewkes et al (2001), following a review of South African literature, concluded that while researchers in the biomedical realm may view pregnancy negatively, African youth may not. Many teenagers are encouraged to become pregnant by their partners to prove love, womanhood and fertility (Jewkes et al, 2001). Adolescent childbirth in many sub Saharan African countries is viewed as normative within the extended family with a newborn baby being cared for by the elder women of the family (Jewkes et al, 2001). Based on this reality, approaching pregnancy "positioned on a continuum of degrees of wantedness" rather than the "static binary categories" in which it has traditionally been placed (wanted/unwanted) may be more appropriate when investigating adolescent sexual behaviours (Jewkes et al, 2001).

Women of all ages throughout sub Saharan Africa, who choose not to have children must deal with their own unhappiness, as well as that of their relatives and husbands, along with a lesser status in society as a whole. On the other hand, they may choose to have children because

they want a child, don't want others to know their HIV status, or want to live on through their child (De Bruyn, 1992). Mill and Anarfi (2002) echo these sentiments, stating "an HIV-infected woman may decide to proceed with her pregnancy, knowing the risk of transmission to her baby, in order to fulfill a societal expectation to bear children" (p.326). Furthermore these authors argue that efforts to prevent HIV infection may be looked at as actions that act "in direct opposition to a powerful social norm."

Changes in cultural traditions

With increasing social and economic change, Uganda is experiencing a breakdown in traditonal practices. In the past, education on sexual matters for females was the responsibility of the paternal aunt, the senga, while males were educated by community elders. Increasingly, this has become non-existent creating a gap in the social norms for acquiring sexual knowledge. Thus young people are turning to peers and other sources, for information that is often unreliable and contradictory (World Bank, 2001; Betts et al, 2003; Muyinda et al, 2003). In a study (Muyinda et al, 2003) conducted in rural Uganda, reintroducing the senga institution by training female volunteers led to increased knowledge of HIV transmission, more communication about sexual matters, increased condom use, lower levels of reported STDs and increased use of family planning services as compared to females who had not visited sengas. The study also generated interest among adolescent males, suggesting that there would be benefit in training uncles as well (kojjas). Sengas were a well accepted educational form for both in school and out of school youth, and allowed behaviour change to take place within the existing cultural system, thus generating greater community acceptance and involvement (Muyinda et al, 2003). The role of the senga serves to overcome communication barriers that exist between the parent and the child. Generally, embarrassment pervades the relationship between parent and child when it comes to discussing sexual matters. In addition, in many cases, the parent is not as well versed in reproductive health matters as the adolescent child, thus creating an uncomfortable disparity

(Ngom et al, 2003). However, the parental role is important to nurture given that vulnerability and resilience of adolescents are greatly influenced by their family environment (Ngom et al, 2003; Rutter, 1993). Communication between parent and child, parental expectations, and presence of parents in the home all reduce the likelihood that adolescents will risky health behaviours (Ngom et al, 2003; Resnick et al, 1997)

Religion and sexuality

The complex interplay between religion and sexuality is also important to consider, given its influence on sexual decisions and opinions. Studies on religion and AIDS in Africa have found religion to be an important factor in predicting AIDS protective and risk behaviour (UNAIDS, 1998). On the one hand, the influence of religion can be conveyed through the societal bonds that it fosters and the responsibility that it promotes. On the other hand, it can constrain individual actions through specific judgments, such as not using condoms for religious purposes. (Garner, 2000).

Miller and Gur (p. 401, 2002) found that among a representative sample of adolescent American girls, "sexual responsibility was positively associated with personal devotion and frequent attendance of religious events but inversely associated with personal conservatism." Thus frequent attendance at religious events and involvement in the religious community resulted in increased risk perception for HIV infection and pregnancy, and responsible use of birth control. However, personal conservatism was negatively associated in that those adolescents who received a high score in this areas were more likely to be exposed to unprotected sex and to allow males to control birth control use. As Miller and Gur (p. 404, 2002) speculate, "If sexual activity is strictly forbidden, perhaps girls fail to develop strategies for insisting on birth control, lack of knowledge and access to birth control, or do not fully acknowledge the responsibility of intercourse."

In the aforementioned study by Kinsman et al (2001), Roman Catholics were less knowledgeable and less positive about condoms than non-Catholics. Magnani et al (2002) report

that in their study of Zambian youth, Protestant and Catholic youth were less likely to have used condoms during last sexual encounter or consistently with last/most recent partner than respondents of other religions. Thus while adolescents adhere to the condom message, they do not adhere to the message of abstinence (Joffe and Bettega, 2003). In some cases, adolescents whose religion is important to them lack a sense of personal risk, in that they feel they if they are following God's commandments and abstaining, then they have nothing to fear (Joffe and Bettega, 2003). Religion can be used to perpetuate ideas that associate AIDS with promiscuity, viewing AIDS as a punishment from God, a sign of immorality, or providing a context within which to create stigma for people with AIDS (Takyi, 2003; Joffe and Bettega, 2003).

Summary

Literature on the topic of adolescent sexual behaviour throughout sub Saharan Africa demonstrates that African adolescents, and Ugandan adolescents specifically, are forced to contend with a number of issues when dealing with their own sexuality. Sexual behaviors and the manner in which they are carried out, represent a complex mosaic of factors, including social barriers such as adult disapproval, discomfort with contraceptives, patriarchal attitudes and violence towards women. Poverty and its consequences also affect sexual decisions, leading some to make poor decisions based on economic need, rather than personal safety. In addition, societal institutions such as education and religion and cultural ideals such as the value placed on fertility also influence sexual decision-making. Adolescents are increasingly exposed to situations that challenge their cultural heritage with modern ideas and western based ideals. The multi faceted environment in which adolescents carry out their daily lives contains a number of forces that influence sexuality. Thus, any examination of adolescent behaviour requires an appreciation and comprehension of the unique position of adolescents in society, as well as the complexity of the context in which they live their lives.

Purpose of the Study

In the current pilot study, Ugandan adolescent perceptions of pregnancy and HIV infection, including the relationship between the two issues were explored. The questions posed not only allowed investigators to see if there were similarities and differences in how the topics were approached, but also if there was a tangible relationship in the minds of adolescents. While past literature has established HIV infection and teenage pregnancy in separate domains, this study thought it important to explore the relationship between these two areas in greater detail. Furthermore, an examination of how their perceptions influence their approach towards prevention was undertaken. One area of particular attention was that of dual protection and its role in prevention. While there was no attempt to address them directly, it was expected that social norms, values, attitudes and knowledge, would play a considerable and inherent role in how adolescents perceived their risk. Specific social norms and value statements were expected to arise around topics such as the roles of males and females within a relationship, different types of relationships (short term, long term), the value placed on fertility, and stigma associated with HIV infection, teenage pregnancy, and contraceptive use.

By engaging adolescents in discussion around these topics, we:

a) Identified important similarities and differences between risk perceptions of pregnancy and risk perceptions of HIV infection and how they are prevented
b) Identified if there is an established connection in the minds of adolescents around the topics of HIV infection and pregnancy

Research Questions

In order to explore adolescent views on HIV and pregnancy, the following research questions were addressed:

1) How do Ugandan adolescents view pregnancy and its prevention?
2) How do Ugandan adolescents view HIV infection and its prevention?
3) Do Ugandan adolescents make a connection between the issues of pregnancy and HIV infection?

CHAPTER 3

Study Design

Conceptual Framework

One of the primary theoretical constructs used in the field of health education and promotion is the Determinants of Health Framework (Evans et al, 1994). This framework focuses on a variety of factors that are implicated when considering an individual's health (see Figure 3.1).

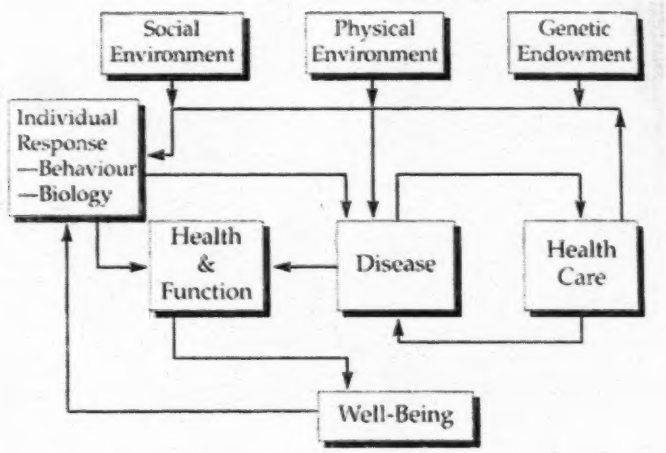


Figure 2.4 Relationship between social and individual factors and health

Figure 3.1: Determinants of Health Framework "Relationship between social and individual factors and health" (Evans et al, 1994)

As the diagram displays, the framework goes beyond the traditional, simplistic model that presents the level of health in a population as the inverse of disease burden. Rather, it encompasses the many factors that result in the disease state, including individual biology and behaviours, genetic endowment, as well as the physical and social environment. The framework also includes health care as an important factor in defining and interpreting diseases and assessing what health care needs are unmet. Due to its consideration of the broader environment, this model holds direct relevance when considering adolescent sexual behaviour. For the purposes of this

study, while the determinants of health framework formed a broad scheme, a more specific model was provided by Hancock and Perkins (1985) of the University of Toronto. The Mandala of Health model is a comprehensive and dynamic conceptual model which encompasses the many

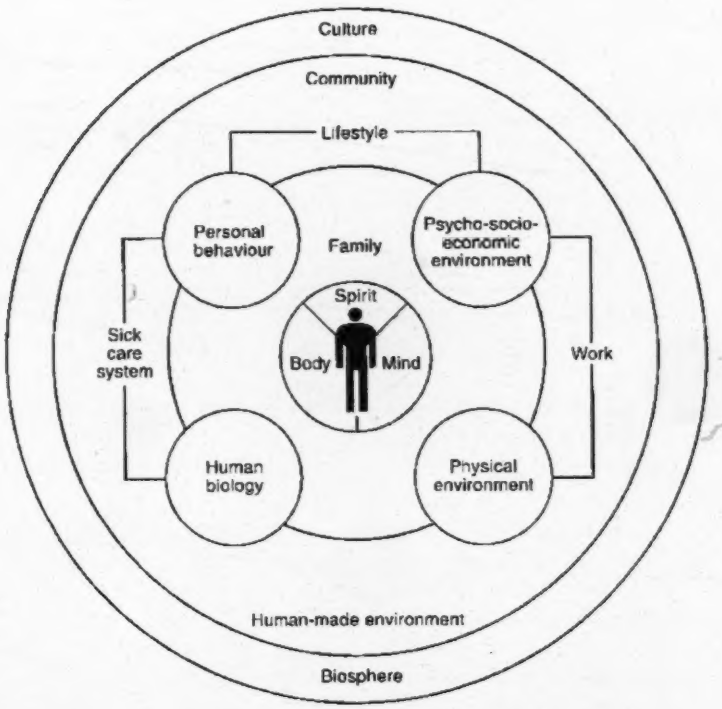


Figure 3.2: --The Mandala of Health (from Hancock and Perkins, 1985)

environments in which health is determined. At its centre, is the individual, who is the focus of health concern. The model also shows the family as playing a key role in establishing health values and habits, and providing a protective barrier from the larger community and culture (Hancock and Perkins, 1985). The diagram displays four important factors that influence health, including human biology (i.e. physiological and anatomical state, genetics), personal behaviour (i.e. risk taking behaviours), psycho- social environment (i.e peer pressure, exposure to advertising, social support systems), and physical environment (i.e. shelter, neighborhood). The

term lifestyle as displayed in the model, refers to personal behaviour "as influenced and modified by and constrained by a lifelong socialization process, and by the psycho social environment, including cultural and community values and standards." (p. 8, Hancock and Perkins, 1985). Also shown are the medical system which has obvious influences on health, as well as the community with its values and standards. Finally culture plays an overarching role. As stated by Hancock and Perkins, (1985) "Our health, the way in which we perceive it, and how we react to illness are heavily influenced by our cultural attitudes, values, and beliefs (p. 8)". Thus the Mandala offers a means by which to link the individual to the community and to the culture itself. In the context of Uganda, we are aware of the influences of cultural values, political direction, and lifestyle choices on sexual practices and decisions. The Mandala is a specific and comprehensive model that deals with many of the factors which the study attempts to explore, including personal behaviours, psycho social environment, and cultural influence. This study, which attempts to better understand the influences of larger contextual factors as they relate to adolescent perceptions of HIV and pregnancy, uses the Mandala of Health, as a specific example of a determinants model.

Methods

An exploratory, qualitative study of boys and girls between the ages of 14 and 18 in selected schools in Fort Portal, Uganda was undertaken over a time period of three months. Data were collected through focus group discussions with secondary school students as well as key informant interviews with health professionals who provide family planning and HIV preventive services in the region. An exploratory approach allowed investigators to get an important initial picture of the perceptions that currently exist. The limited information available in current literature on the issues of teenage pregnancy and HIV infection as related topics suggested that, at this stage, initial questions and study format must attempt to elicit data in an unrestricted manner. By limiting any impositions on the data that investigators were seeking, they were able to gain

insight into various avenues with which to determine further research and policy recommendations.

The Research Team

The research team assembled to carry out this study represented a number of individuals who are experienced in both research and program development. Each member of the team was able to offer critical insights into adolescent sexual behaviour in Uganda. In addition to the Canadian team of principle investigator, and supervisory committee members who hold appointments in the faculty of Public Health Sciences and Nursing at the University of Alberta, the study was enhanced by cooperation from the Ugandan research collaborators. The field work was largely conducted through the resource provisions of the Basic Health Services Team in Fort Portal, Uganda. The Basic Health Services project was established in 1987 through cooperation between the Ugandan Ministry of Health and the German Development Corporation (Deutsche Gesellschaft Fuer Technide Zusammernarbeit (GTZ)) (Killian, 2002). The BHS team has overseen a number of research initiatives and programs in the region and served as a collaborator to prior cross cultural research undertaken by University of Alberta students (Killian, 2002). To this end, BHS was able to provide supportive staff, including the BHS team leader, who served as the in field supervisor for the principle investigator. The District Officer of Health also oversaw project activities. Additionally, the social worker employed by BHS, who had past experience in conducting focus groups and working with adolescents, was able to serve as the research assistant for this project. Other support provided by BHS included additional support from available staff, office and interview space, and community contact persons.

Methodology

The primary methodology consisted of eliciting information through student focus groups as well as supplemental data collected from health care professionals through one on one interviews. The reasoning behind choosing focus group discussion above other qualitative approaches was to create a research environment which reflected the environment in which sexual norms are carried out—a social environment. Using one on one interviews does not allow for the peer concentrated dynamic of focus groups, nor does it allow participants the opportunity to support and encourage one another through what could at times could be considered uncomfortable topics. Given the importance of peer interplay in forming ideas on sexuality, it was felt that focus groups would produce more comprehensive information. Kitzinger (1995) points out that focus groups explicitly use group interaction as part of the method to explore knowledge and experiences and gain insight into attitudes, perceptions, and opinions of participants. The focus group serves as a permissive and non-threatening environment in which participants can discuss issues at hand (Krueger, 1994). This environment allows moderators to observe various types of communication used in day to day interaction, which draws attention to cultural values and norms (Kitzinger, 1995). This sentiment is echoed by Ulin et al (2002), who point out that focus groups can be effective data sources for studies that investigate social norms, expectations, values, and beliefs. Thus focus groups act as a data collection technique that is particularly sensitive to cultural variables (Kitzinger, 1995). Morgan and Krueger (1993) suggest the researcher consider the following points, all of which are relevant to the study at hand, when deciding upon the use of focus groups in qualitative research. They suggest the use of focus groups when: 1) there is a power differential between participants and decisions makers; 2) there is a gap between professionals and target audiences; 3) investigating complex behaviour and motivations; 4) one wants to learn more about the degree of consensus on a topic and; 5) there is a need for a friendly research method that is respectful and not condescending to the target audience.

Focus groups were usually held in empty classrooms that were away from other students. For the purposes of focus groups and interviews, the principle investigator served as the moderator and main interviewer, while the research assistant served as the recorder and observer, occasionally clarifying participant statements and adding to overall discussion. Students were seated in a circular manner around a table, with the research assistant and moderator forming part of the circle. After introducing herself and the research assistant, the moderator proceeded to read through the information sheet and obtain informed consent. After this point, the ground rules for discussion were explained (see Appendix 2). Any questions about the process were addressed and then the moderator conducted a short icebreaker activity, which allowed each participant to talk about themselves and their interests. Students were chosen from a variety of age groups and school levels, suggesting that they knew of each other, but had not formally met. Thus introductions and icebreakers allowed the group to become better acquainted and more comfortable. After the icebreaker activity, the moderator began asking questions from the interview guide. Each question was asked to the group in general, and then each participant was given the opportunity to respond or pass. At any point, participants could interject comments, as long as they did not interrupt another speaker. This allowed for dialogue to move back and forth on a number of topics and to be enhanced as a number of varying or concurring opinions were heard. At the end of each focus group discussion, a question period was held, whereby students could ask any question they wanted about any related topic. This proved a useful exercise in that it further elaborated on areas of interest to the students. Occasionally, if the students were interested, a short condom demonstration was performed by the research assistant or moderator. No monetary stipend was given to student participants, however, refreshments were served and small gifts such as souvenir pens and pencils were distributed. The group was dismissed with the understanding that they could contact the moderator or research assistant at any time for further information.

Interviews with health professionals served as a supplemental data source, and used a semi-structured format. Open-ended questions allowed for flexibility in the interview and gave the participants the opportunity to fully explain their responses (Britten, 1995). Interviews were scheduled in advance with each participant and a location was decided upon between interviewer and participant. Locations ranged from offices to boardrooms, local canteens and coffee shops. Any environment where the interviewer and participant could conduct the interview, without interruption and with a reasonable amount of privacy was deemed appropriate. As with focus groups, at the start of each interview, the information and consent form were completed. The interview was conducted by the principle investigator with notes being taken by both the research assistant and principle investigator. Interviews lasted approximately one hour. At the completion of each interview, a stipend (equivalent to local busfare to Kampala from Fort Portal) was given to the study participant for their time and assistance. This stipend amount was chosen arbitrarily, based on what was considered to be a fair remuneration for time given. This was considered an appropriate and necessary gesture, given that the health professionals were taking time away from their work day to participate in the study.

During the interviews with health officials, the researcher explored the information outlets available to students within the community, their views in relation to adolescent ideas on sexual activity, and attitudes toward family planning and HIV prevention strategies. The interviews enabled the researcher to involve program experts and decision makers in the research, thus encouraging future collaborative effort and use of the study results.

Limitations of the study

Primarily, because study participants were restricted to adolescents who attend school, the results do not represent the viewpoint of all youth in the region (such as those who are not attending school in the region). As many of the health professionals expressed, there is a stark difference in the resources and knowledge base of in school and out of school youth, as well as

urban and rural youth. Thus, the data presented in this study can only be considered in the context of the particular students interviewed. This is to be expected in a qualitative study where results are confined to the study population and not considered representative in any way.

Additionally, with the use of focus groups, researchers must acknowledge the hindrance of negative group effect whereby participants may edit or censor their comments to conform with the group. Group dynamic may act to silence individuals' disagreement with the group (Kitzinger, 1995). In some cases, the group environment leads to conformity, whereby participants feel the need to conform to other's ideas, or are intimidated to express different thoughts (Frey and Fontana, 1991). Given that in all cases, the focus group discussion was the first occasion for the moderator to meet the students, she was unaware of group dynamic prior to discussion, how the opinion of one member could sway others, or how relationships outside of the focus group discussion could influence response patterns (Frey and Fontana, 1991).

Focus group participants were a convenient sample, chosen by the headmaster and affiliated school staff. This method was chosen in an attempt to achieve neutrality and not have the principle investigator influence the students' desire to participate. However, the opposite side of this method is that it is impossible to discern whether the students comprised a variable cross section of the student population. Ideally, each group would include over and under achievers, shy and outgoing students, student leaders, and the proverbial class clown. Given the bias that may exist in favor towards certain students who perform well, it is possible that a strong mix was not achieved. The principle investigator felt that most groups had a combination of shy and outspoken students, however, it is difficult to asses whether there were high and low achieving students in the group. Future similar studies would benefit from making an attempt to dictate the rule that students of all personality and various interests be chosen.

Attempts were made to create an open and relaxed environment through informal introduction and ice breaker activities, however, it is difficult to guarantee that participants discussed all topics with ease and honesty. Participants may have also been inclined to give

answers they felt might be expected by the researcher. Additionally there was the issues of "social loafing" whereby some participants were not very frequent contributors to the discussion . It is difficult to determine whether these participants agreed with what was said, or disagreed but did not wish to say so (Asbury, 1995). Given that many of these limitations were expected, efforts were made beforehand in planning between the moderator and research assistant to be aware of body language, facial expression, and intonation as questions were asked.

That being said, the moderator and recorder are by no means experts in the field of conducting focus group discussions, and may have unknowingly influenced the behaviour of adolescent participants. It is impossible to determine whether or not a sufficient level of comfort and trust was established for the students to be completely honest. While it is hoped that participants felt comfortable in expressing themselves, there is always the concern that in some cases, they gave "textbook answers" or answers that they felt the moderator was looking for, rather than answers that reflected their true opinion. In male focus groups there may have been a tendency (although it was not noticeable) for males to be less open, given potential shyness with a female moderator and recorder. It is a fair assessment to conclude that the presence of strangers (in this case, the moderator and recorder) in both male and female groups act as a means of inhibiting responses on certain questions while elaborating responses on others (Morgan, 1988).

Another limitation of the study was the various time constraints experienced by the research team. Because the principle investigator was only in the field for three months, all data had to be collected in a given time frame. Time spent with the students was constrained as well, given their hectic examination schedules and rigorous daily schedule. In the time span of two hours, priorities had to be established on which questions would be given more time, and in some cases, which specific topics would have to be truncated. In some instances, further probing could have enhanced the data set, but time constraints would not allow it. Having the ability to return to various schools and further probe participants on certain topics also would have enhanced the

current data set, however, time was limited due to examination schedules and these guidelines had to be respected.

In some cases, physical space acted as a limitation. Certain schools were able to offer much more comfortable and appropriate surroundings for focus group discussion, away from noise and interruption, while other schools, particularly day schools, did not have the space to offer rooms that were as private. While confidentiality was always maintained, the open air design of some of the rooms allowed outside noise and thus interruption into the flow of discussion.

In conducting the proposed study, researchers were aware of the barriers that have arisen given the nature of cross-cultural study. These included cultural differences, a potential suspicion of out of country investigators, and difficulty in gaining trust when asking questions of such an intimate and private nature. In an attempt to address these barriers but also create sustainable solutions, the investigating team consisted of both Canadian and Ugandan researchers. This allowed collaborative effort in navigating the cultural differences that arose, but also served in some part to initiate trust and awareness within the community, and especially among the research participants.

While it is difficult to know for certain how many focus groups should have been conducted in order to reach saturation of the ideas and information available, it is proposed that 8 focus groups were sufficient. Saturation of data (Ulin et al, 2002) was assessed at the point in which the principle researcher felt that no new insights were being gained within the discussions and interviews.

Sample

The study sample consisted of adolescents from the age of 14-18 in local Uganda secondary schools in Fort Portal, Kabarole District. Local schools were chosen because they provided an easily accessible audience. The schools were chosen based on consultation with

research partners in Uganda. Each focus group consisted of one moderator (principle investigator), a recorder/observer (research assistant), and 7-10 students. A total of eight focus groups were held in the first two months of field work. Two focus groups were conducted in a male boarding school, two were held in female boarding schools, and a total of four were held in mixed day schools. All focus groups were gender specific (male only and female only), in order to increase comfort levels of the students involved. It is believed that the degree of openness would not have been achieved in mixed groups, where girls and boys might not be comfortable discussing sensitive issues with members of the opposite sex present. In total, 38 female adolescents and 32 male adolescents participated in the study.

Participating secondary schools were recruited through meetings with the Ministry of Education, as well as local headmasters. Scheduling of focus groups was based on examination schedules and fieldwork deadlines. Schools were either mixed day schools consisting of both male and female students or single sex boarding schools, where the students were either male or female and resided on the campus. Mixed day schools were largely comprised of local students, and sometimes more unruly and crowded than the boarding schools. Often boarding schools are known to house students from various districts and have a student body of higher socioeconomic status (Omony Flory, personal communication, September 17, 2003).

After the headmasters were briefed, students were briefed by the headmaster (or a teacher who was to oversee participation) and invited to participate. The headmaster was asked to present the outline of the study and its objectives to the student body and students were asked to become voluntary participants. The selection of students was left up to the headmaster and school staff, however, there was no evidence given that volunteers were difficult to recruit. Upon initial meetings with headmasters, most expressed that their students would be happy to take part. Volunteers were selected on a first come basis, with an attempt to recruit a range of ages. Selected volunteers were given the information sheet and told of the scheduled focus groups. At the start of each focus group, the information sheet was reviewed and participants were asked to

sign the consent form. While the attempt was made to schedule all focus groups after school hours, this was found to be difficult due to transport issues and conflicting after school activities among most students. Thus when the headmaster saw fit, students were given the opportunity to leave scheduled classes to take part in focus group discussions. Only invited participants, moderator and research assistant were present. As mentioned, the most common location used for discussion were empty classrooms set away from other classrooms where others might overhear the topics of discussion.

Supplemental data were collected from key informants involved in delivering family planning and HIV prevention services in the area. A variety of health workers were chosen, including four managers of local non-governmental organizations that deal with HIV/AIDS and family planning, two local clinic nurses, and four youth group leaders representing three local youth education initiatives. Health professionals were chosen on a referral basis by collaborators at Basic Health Services in Fort Portal. As mentioned, only the interviewer, interviewee and research assistant, who acted as a recorder and observer were present during these interviews. Selected key informants were provided with an information letter prior to the interview and asked to sign a consent form before the interview began.

Interview Questions

A focus group questionnaire was created to serve as a broad discussion guide. While the questions pertained to the topics that the researchers aimed to address, it was a flexible guideline, with the moderator spending more or less time on given topics based on the dialogue that was generated. No particular approach (such as funnel approach or pyramid approach) was used in organizing questions. Rather, topics were arranged in a seemingly logical order, dealing with pregnancy, then HIV, then questions that dealt with both issues, such as questions on dual protection, or mother to child transmission. Each session ended with short discussion of where adolescents went to find information, and a question period. An attached copy of the focus group

discussion guide is included along with a copy of the semi-structured interview questionnaire used with health professionals (Appendix 2a and 2b). These interview guides and schedules were reviewed with Ugandan researchers upon arrival in the field, however no substantial modifications were made.

Moderating focus groups proved to be a difficult task on occasion, with the researcher having to determine the ambiguous line between objective researcher and compassionate listener who gains the trust of participants. This required a certain amount of skill and practice. The one thing that the moderator tried to ensure was that she allowed discussion to flow and did not inject her own opinions or thoughts at any time. The moderator also paid close attention to her intonation and body language when introducing discussion topics so as not to unconsciously influence how the participants would respond. In order to strengthen the study, a local researcher, experienced with focus group facilitation assisted with group moderation. Over time, moderating focus group discussion became easier as the principle investigator became more familiar with student behaviour and cultural phrases. Because the area is English speaking, there were few issues with language barrier. Culture specific subject matter and phrases which arose were verified during data cleaning. The in country research assistant assisted greatly in translating and identifying this culture specific wording.

Upon arrival in the field, the principle investigator conducted short training sessions with the co-facilitator to ensure familiarity with the research questions. In an attempt to strengthen the focus groups used for data collection, two pretest focus groups (one male and one female) were held in a local mixed day school. This allowed the researchers to get an idea of what order the questions were best asked, whether the wording of the questions was appropriate and whether students were generally willing to discuss the specific topics brought forward. While it was proposed that upon initial reading of transcribed data, the principle investigator would possibly ask participants of specific focus groups to return for further discussion or to follow up on previous discussions, if necessary, it was found that course examination scheduling was too

comprehensive to allow for return visits. Thus whatever information could be gathered in one visit was used as final data.

Data Recording

Focus groups lasted approximately two hours and were audiotaped and then transcribed to paper. All focus groups were conducted in English. The primary researcher kept a notebook of thoughts and observations that provided additional data for later use. Upon completion of data collection, all data were compiled from audio tapes, recorded notes and the primary researcher's observation notebook. In transcribing the data, an attempt was made to transcribe discussion verbatim, outlining emphasized words, pauses, and other such vocal activities as recommended by Rothe (2000). Accuracy in transcription, and noting actions such as laughter or nervousness were believed to produce more comprehensive data, and highlight nuances that could potentially influence how the discussion was interpreted. The same approach was followed in recording and transcribing semi-structured interview results.

Ethical Considerations

Ethical approval for this study was received by the Health Ethics Review Board at the University of Alberta, in July 2003. Upon arrival in Uganda, further ethical approval was obtained from the National Science and Technology Council of Uganda, based in Kampala, Uganda. Approval of both ethical boards was granted through submission of the formal research proposal and all accompanying documents. Finally, permission was sought through signed approval from the District Medical Officer and District Educational Officer in Fort Portal, in order to gain access to secondary schools in the area.

Particular attention was paid to ethical issues such as privacy and confidentiality and ensuring that students were aware of what they were consenting to. As in past similar studies conducted in Uganda, the headmaster gave verbal consent for student participation on behalf of

the students' guardians. Furthermore, at the beginning of each focus group discussion, written consent was obtained from each of the students, allowing the students the opportunity to withdraw at any time during the focus group discussion if the need arose (Nzioka, 2001). Part of the briefing entailed informing participants on issues of respect and privacy, assuring them that the researchers would keep all information confidential and that they, by nature of participation, were expected to do the same. Being aware that the nature of the subject is sensitive and not always comfortable, and that often, secondary schools and small townships are close knit with a tendency for gossip, researchers did their best to ensure that the students' right to confidentiality was protected, while still eliciting truthful and detailed information. Students were assured that in the final report all comments would remain anonymous, and that their participation would not be divulged to others outside the discussion room. While all precautions were taken to ensure confidentiality, and to discuss ground rules among the students, they were informed that confidentiality could not be guaranteed, due to the possibility that students within the group may tell others what they have heard after leaving the group. Upon completion of data collection, all tapes and final transcripts became the property of the research team and will be kept locked in a file cabinet in the office of Dr. Lory Laing, Public Health Sciences Department, University of Alberta for five years from the time of data collection.

As expected, the ethical issue of cultural relativism did arise (Mill and Ogilvie, 2002). Many customs brought up in the discussion, sexual and otherwise, were different from North American practice. At no time did the researchers attempt to impart their own belief systems or opinions into the discussion. Throughout the process of data collection and analysis, the principle investigator made conscience attempts to take note of verbal and written ideas conveyed, in order to ensure that North American values were not being imparted on issues within the Ugandan context. This is sometimes a difficult task, however, its importance cannot be overemphasized. Research done in a cross-cultural must show an appreciation for the context in which it is undertaken, rather than try to impose particular beliefs or values. The fundamental concept which

must be derived in applying ethical principles, is that whether research is approached from a universal or relativistic framework, its potential is best realized with a degree of appreciation for culturally sensitive issues, and an understanding of how research is viewed from the subject's perspective. As Benetar and Singer suggest (p 824, 2000), applying ethical principles may not be an argument based on moral relativism as much as it is on the careful deliberation of morally relevant considerations of context. As they astutely point out, "Determining what is ethical goes beyond merely following prescriptions and requires moral reasoning: consideration of all relevant aspects of the case and its context, weighing and balancing competing moral requirements and developing justifiable conclusions". Research that is done with an understanding of the context in which it is carried out will no doubt create more effective solutions for the populations that it is intended to serve.

Methodological Rigour and Data Verification

In an attempt to achieve methodological rigour, Meleis (1996) suggests eight criteria to assess the credibility of what she deems "culturally competent research." These criteria include: 1) Gaining a knowledge of the participant's lifestyle and situations as well as a sensitivity to the structural conditions under which they live (contextuality) 2) Ensuring that the research questions being asked are in fact looking for solutions to a population's issues (relevance) 3) Demonstrating an understanding of preferred communication styles, and uses them in conducting their research (communication styles) 4) Acknowledging that relationships can become one-sided given differences in knowledge, and power, and showing added vigilance in establishing shared authority and data ownership, through collaborative research and elimination of hierarchies in the research environment (awareness of identity and power differentials) 5) Learning about the participant's experience in an authentic manner and fostering trusting relationships (disclosure) 6) Ensuring that both researchers and participants meet their own goals in the research process and through research findings (reciprocation) 7) Giving participants the

ability to feel connected to the research in a meaningful way and raising their knowledge, insight and consciousness into the topic (empowerment) , and finally 8) Appreciating that concepts of time may differ, and using a flexible time-oriented approach which allows researchers greater insight into the research process and less constraint (time).

In the scope of our study, these points were addressed in a number of ways. First, prior to arriving in the field, considerable research of a number of literature and non-academic sources allowed for a clearer understanding of the country. Discussion with committee members who had past experience in the country also served to enhance knowledge of Uganda. By living, working and interacting in the community of Fort Portal for the duration of the data collection, the principle investigator was able to gain further appreciation and understanding of the context in which the research was carried out. By adopting a two tiered approach, whereby students were the main study subjects, and health professionals served to enhance and elaborate the focus group data sets, a more holistic view of adolescent perceptions was gained. Including health professionals from the onset allowed for in country health providers to gain a better idea of what the research findings were conveying, thus empowering them to give further thought to adolescent issues and make changes to their service provisions. Prior to developing a study proposal, the topic for the study was reviewed by the in country field supervisor. As well, all interview guides and research materials were reviewed by in country supervisors and the research assistant to ensure that the format and content were culturally relevant and addressing a question that was important to the population being studied. Researcher bias was minimized by working closely with a research group of moderator, assistant and field supervisor, all of whom had access to the data. This team was able to provide information on the cultural context and important facts about Ugandan lifestyle.

By pretesting the methods with particular students and employing a research assistant who had past experience with adolescent focus groups, appropriate communication styles were developed. Communication style was also improved over the course of the focus groups sessions

as the principle investigator became comfortable with student behaviours and more of the subtle cultural nuances witnessed during discussion. All attempts were made to create an open forum for discussion and put participants at ease throughout the discussion. The students were able to ask as many questions as needed regarding the research process and content and were informed of how partaking in the research would benefit them and those around them. The principle investigator and research assistant worked closely together each day over the duration of the field work term to ensure that data were comprehensive and focus groups and interviews were being conducted in a manner where they were continuously improved and strengthened.

Ultimately all research undertaken was considered beneficial to both Ugandan and Canadian participants. It fostered cross cultural cooperation and understanding, as well as collaborative research towards program development in the region. Attention to these concepts in the context of our focus groups and interviews allowed for greater respect of the culture as well as the research process as a whole.

Data for both student focus groups and health professional interviews were verified in three ways. First, audio recordings and notes taken during the sessions were cross checked against one another to fill in any deficiencies which audio recordings may have not picked up. The transcribed data were also verified by the in country research assistant so that any culture specific wording could be defined. Probing and verification questions were used to ensure that student comments or meanings were not misunderstood. For example, a verification question could be the researcher repeating the respondent's comment in the form of a question whereby the student made a statement such as the fact that they believe that contraceptives are difficult to get a hold of. At this time the researcher followed the comment with a yes/no question such as "So you have trouble getting access to contraceptives?" A probing method could further elucidate the meaning of a student's comments whereby the student states that they are not comfortable approaching the canteen to access condoms and the moderator responds by asking "Why do you feel uncomfortable going to buy condoms?" In addition, an audit trail was

developed during the analysis of the data, details of which are included in the section titled, "Data Analysis".

Data Analysis

The data analysis followed the method outlined by Rothe (2000). After transcription, an overall reading and surface analysis of the transcript was completed. Following this initial reading, the data were organized by question and response sets and divided up as male and female responses to each question. After this summarization and organization process was completed, summarized data were transferred onto notecards. Comparisons were made among the data obtained from male/female focus groups, with specific attention paid to any overlapping data.

Categorization consisted of looking at the statements for similar ideas. This was not necessarily based on frequency of responses, rather it was decided based on ideas that stood out from the data. These categories were then given titles that summarized the main idea they encompassed. For example, "Embarrassment and shyness" referred to all statements dealing with adolescent discomfort and timidity around sexual issues. Female Assertiveness encompassed all the comments that summarized females expressing their thoughts openly and confidently, even if it went against the cultural norm. A specific definition was created for each category to summarize the meaning within the scope of the study. After data categorization was completed, a document was created whereby direct quotes were taken from the data sets and matched to the existing categories. This preliminary document was then completed by the supervisor. Originally, there were 18 categories and resulting statements to match. After the first completion, 82% agreement on the categories and matching statements was achieved. However, when looking at the categories, it was noted that some of the categories were redundant (example Secret Keeping and Schemes and Lies, were collapsed into one encompassing category titled Secrets). Thus 18 categories were collapsed into 13 categories and the document was re-issued to two other parties for verification. The results from the revised document were 69% and 86% respectively

for an average of 78% agreement. After categorization was complete, the researchers developed larger themes in which to group the categories. These themes were developed in collaboration with the supervisory committee. Categories were looked at as a whole and analyzed for common ideas. The major themes derived were views of sexuality, knowledge and behaviour. Many of the original categories fell directly into one of these overarching themes, while others were adapted with a "best fit" approach in mind, given that they fell into more than one theme (e.g. embarrassment and shyness could be considered an attitude which affected views on sexuality, or a behavioural concept). Throughout the entire process, an audit trail was developed through continuous collaboration between the principle investigator and her supervisor. This encompassed the entire process from the readings of transcripts to the grouping of participant statements, to the development and re-ordering of categories. This process of creating an audit trail allowed for transparency throughout the data analysis.

With each subsequent stage of analysis, broader contextual factors which influence adolescent's views on HIV infection and pregnancy and their views on prevention were revealed. Thus ideas were drawn out that related to the individual, the family, the community, and the Ugandan culture thereby reflecting the determinants framework and more specifically the mandala model discussed earlier. Similarly, categories related to personal behaviour, psycho-socio-economic environment, as well as the physical environment. It became evident how adolescent perceptions are not formed in a vacuum, but intimately tied to their various surroundings, from immediate everyday context to their broader sociocultural environment. Ultimately, the data served to establish program and policy recommendations that will be stated in a final report for dissemination.

Data analysis from the semi-structured interviews served as a complement to focus group data and was analysed using a similar but less formal process. Interview data eventually served to verify the findings from focus groups, in that many of the health professionals who were spoken to identified the same ideas about adolescents that were conveyed in focus group

discussion. Interview data were examined for general ideas rather than embedded themes due to the fact that health professionals were not the main research subjects. Rather, they were recruited in order to gain a broader overview of adolescent sexual health services, and local impressions of adolescent sexual behaviour. A full reading of the original interview transcripts was undertaken with key points being highlighted throughout. The data are organized based on general ideas, with the interview guide forming a loose structure on which to organize responses. Health professionals were able to give an overview of the services available as well as an impression of adolescent attitudes and perceptions, as experienced by them in their own work in and around Fort Portal. Thus interview data served to elaborate on the context into which focus group data could be placed.

CHAPTER 4

Results and Discussion

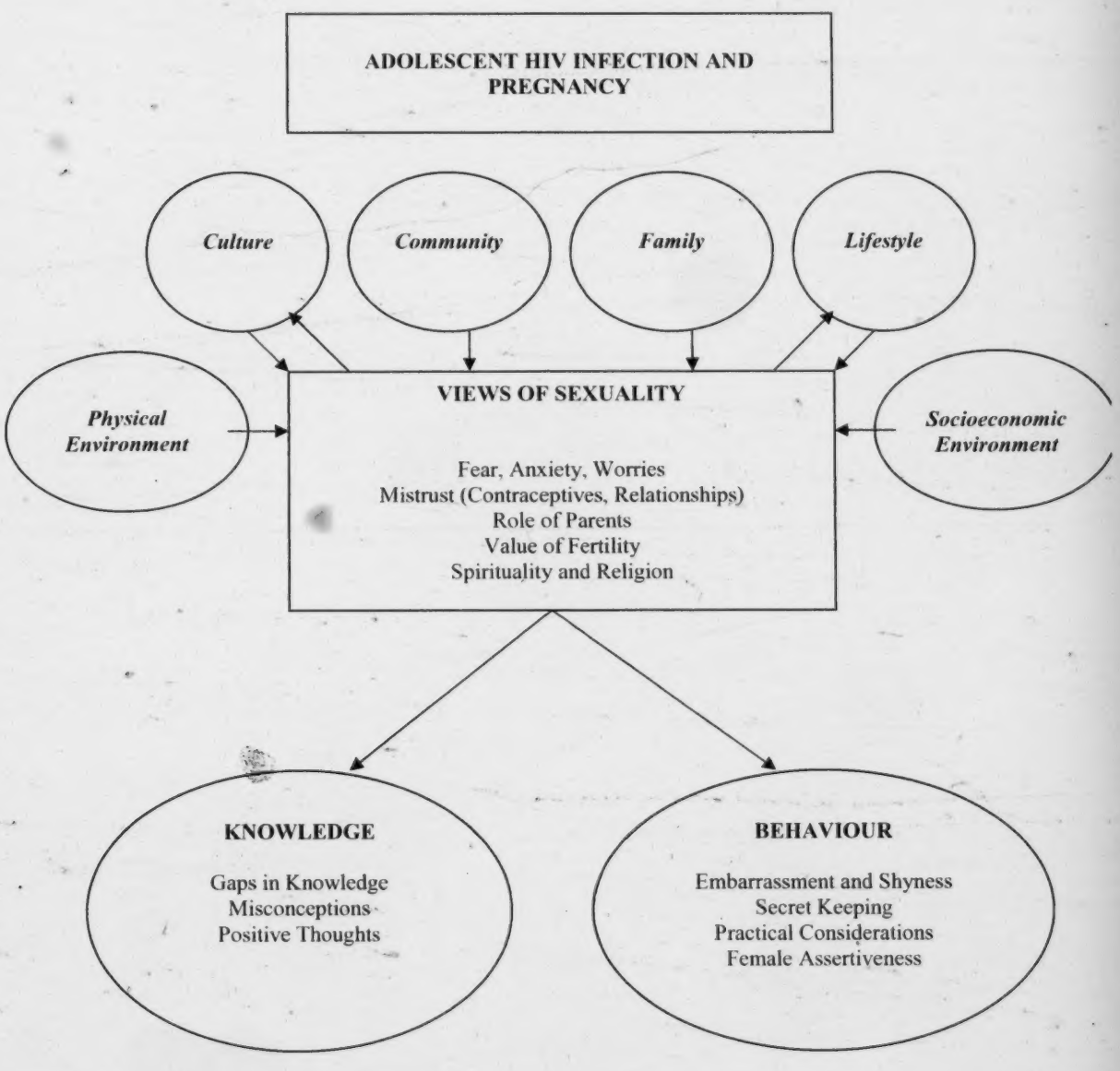
Introduction

The following section describes the results obtained in focus groups discussions with secondary school students within Fort Portal and surrounding areas. Data analysis resulted in the creation of an overarching theme titled "Views of Sexuality", which further influences two other major categories, "Knowledge" and "Behaviour". Each of these categories contain specific sub categories explaining the larger theme. Thus the study findings explore how sexuality is perceived in a social and cultural context, how these contexts influence the dissemination and comprehension of sexual topics, and their influence on adolescent sexual behaviours . It is difficult to distinguish a particular topic as only fitting into one category, however, for the purposes of this discussion, topics are included where they are thought to best fit in the larger theme. The categories are as follows:

1) Mistrust contraceptives
2) Mistrust relationship
3) Fear/Anxiety/Worries
4) Embarrassment and Shyness
5) Role of Parents
6) Value of Fertility
7) Spirituality and Religion
8) Misconceptions
9) Gaps in Knowledge
10) Thinking Positively
11) Secret Keeping
12) Practical Considerations
13) Female Assertiveness

Themes and categories reflect that there is still a considerable amount of societal discomfort around the topic of premarital sex which is projected onto adolescents and manifested in various attitudes and behaviours. While young adults exhibit knowledge about sexuality, there are still a number of important areas that need clarification.

Figure 4.1: Diagrammatic Representation of Focus Group Results



The diagrammatic depiction of the study results show larger contextual and environmental factors as affecting adolescent views of sexuality, which further influence knowledge levels, and behaviour. The dual arrows represent the fact that influence is bi-directional in certain areas. Ultimately, the diagram aims to place the study results into the context of the Mandala of Health (p. 33) and Determinants Framework, displaying how larger factors such as family, community and culture affect views, knowledge and behaviour around sexuality.

Views of Sexuality

Views of sexuality are clearly linked to the larger societal context in which they are formed. As sexual activity is to a large degree, socially constructed, any effort to assist adolescents' sexual decisions must include a comprehensive understanding of young people's values, influences, and larger social context (Kinsman, Nyanzi and Pool, 2000). Past literature has listed some of the fundamental forces that influence adolescent behaviours, including parental care and family context, school and education, peer influence, and economic factors (Twa Twa,; 1997, Resnick et al, 1997).

While secondary school students have access to many information outlets, such as radio, newsprint, and school curriculum, in the current study, there seems to be a pervasive attitude that sexuality should not be discussed openly. Many of the focus group participants, especially young girls, were reluctant to openly discuss important topics around sexuality, stating their responses hesitantly or with nervous laughter. While this could have been in part due to personality factors, there was clearly an element of cultural propriety involved. Views of sexuality are influenced by a number of important factors and the larger context in which adolescents live their lives. Therefore, parents, school teachers, health workers, and other adults, peers, personal thoughts and ideas, and cultural norms all play a role in adolescent sexual decision making. This concept is

further explored in the following categories, which elaborate on focus group findings and adolescent thoughts.

Fear, anxiety and worries.

A common topic that arose among adolescents when discussing the issues of HIV infection or teenage pregnancy, was the anxiety and fear they felt. African adolescents live in a social environment where premarital sexual activity faces disapproval and stigma (Brieger et al, 2001). This makes it difficult for young people to feel comfortable in their sexuality. Studies have noted that issues such as emotional conflict and sexual guilt, as well as difficulty in obtaining contraception can act against the use of contraceptives (Adinma, 1999). Participants' anxiety and fear included, but was not limited to the health effects of HIV infection (where they feared health repercussions for both mother and child) and early pregnancy. Rather, it extended into the social consequences of their sexual behaviour, including enduring social displacement, as well as disappointment in themselves, and the disapproval of their peers, parents and other adults in society.

One type of worry expressed dealt explicitly with the health effects of sexual behaviour. In some cases, the fear was based on valid concerns. For example in regard to having a baby when HIV infected, many young people worried about the fate of the child, and how it would survive if infected, as well as who would look after it:

"1-13 R8) Me I feel I shouldn't have one, because the chances of that baby being infected is so high and if that baby is not infected, I may die and leave it there and who will take care of it, so I feel I shouldn't.'

Worries were also expressed over having a child at too young an age, such as the following statement by a young male in a mixed day school:

"1-12-R5) I think teenage pregnancy has the following problems: First problem, in case the girl is pregnated when she is still young, during the time of delivering, the child may die because you may find that the hips is not yet enlarged therefore the child may die during the time of delivery."

Much of the fear expressed was in regard to pregnancy and directly related to worry about the future. Males and females both felt that an unexpected pregnancy could cause them to carry a great deal of burden, including the care of the child without parental assistance, lack of financial earnings, and expulsion from school. While boys did not always fear school expulsion, they did point out their fear of being arrested for impregnating a minor, which is considered an illegal offense in Uganda. However, for secondary school students, a premature departure from their academic environment was considered to be an extreme loss because they viewed their education as their chance to gain a stable future, whereby they could become respected individuals and earning members of society. Whether it be members of day schools, or boarding schools, it was clear to see that their education was something that was highly valued:

"1-12-R8) Teenage pregnancy is not good, because if you are girl and are pregnated, when you are still a teenager, first of all if you are in school, you may drop out of the school and hence lose your future. But not only the girl is affected but the boy who has pregnated that one, if he happens to be in school also, maybe he may fear to be arrested by the parents of the lady and maybe he will seek to run away. He may also lose his future, therefore teenage pregnancy should be avoided."

'2-1-R8) For me I would be ashamed and really disappointed and I think I would disappoint my parents and I think I can't have a better future because I would be forced to be out of school and when you are not educated, you can't have a better future.'

"1-24-R1 I would really feel so bad and out of place and really I wouldn't know what mood I would keep on, I really feel every time I would feel dispirited because I would have tarnished my future-*how do you think you would tarnish your future?*-Because I would have spoiled the steps that I would be taking—for example I wouldn't go on continue to university because maybe I would spend some years at home looking after the child at home and things of the sort, which wouldn't be so good."

In the case of pregnancy, young girls just like young men had many worries. They expressed a great deal of concern in regard to what others would think or say about them, how they would tell the boy that they were pregnant, as well as the concern over whether the boy would deny responsibility for the pregnancy:

"1-2-R4) Sometimes you find that if a boy impregnates you he takes part, but if you are studying with the same boy in the class, the moment he realizes you are pregnant, he disappears and you never see him back, that leads you to suffer a lot. Your parents have abandoned you, you don't fit in because everyone is saying look at that girl—*sc clarifies "the boy doesn't come to school*

anymore?" (Response) "the moment the boy impregnates you, he is expelled from school, he sometimes runs away if he notices you are pregnant."

Fears and worries expressed by adolescents often included feelings of depression, isolation, and abandonment. This was due in part to feeling out of place in society, and the resultant loneliness, but also related to feelings of shame and discouragement Many of the students felt that they would not be able to turn to anyone, and that they would be abandoned by their friends and family. This translated into feelings of hopelessness and sadness, and many students mentioned running away to escape the problem, or even contemplating suicide, especially in the event of an early pregnancy:

"1-1-R2) Your parents can get cross with you and abandon you from home, you get ashamed from being with your friends cause you feel you are not fitting with them and the boy who you thought made you pregnant may deny and get suffering because you start looking for where you can stay because your parents have abandoned you and you start looking for other ways and maybe you will commit suicide and die or run to the streets."

The fact that such strong statements are made indicates that adolescents find their immediate social context to be unforgiving and uninviting when they are faced with an early pregnancy. Adolescents indicated that they would feel that there is no one to turn to, and that they feel fear and anxiety in dealing with society's criticism.

Mistrust of contraceptives.

Literature that investigates the effectiveness of condoms and other contraceptives among African adolescents reflects a general feeling of mistrust. Students have been cited as having limited comfort with condoms, as well as limited comfort with other safe sex practices (Harrison, 2001). Findings in past literature regarding adolescent perceptions of condoms, list condoms as ineffective, acceptable for use among adults, or for use by those who are promiscuous (Nzioka, 2001). Condoms have been cited as everything from being laced with HIV to a sign of physical and moral contamination (Nzioka, 2001). The literature reviewed was not as explicit in regard to

discomfort and mistrust towards other common contraceptives such as the birth control pill however, focus group results in the current study clearly show that adolescents had many reservations.

Most of the focus group participants expressed skepticism when discussing common contraceptives such as condoms or the birth control pill. While in many cases, the students said they would still use some contraceptive form (usually condoms), many felt that using contraception was not highly effective, and that they were still putting themselves in danger:

"1-30-R6) I could just use it (i.e condoms) for emergency because it only protects one for getting protection against pregnancy, but it does not protect against AIDS or other diseases and so I would just use it in emergency. I would use to not get pregnant, but I would know I am likely to get AIDS or HIV using it."

This comment shows that this young person does not always feel safe using a condom, and in some instances would use it solely to protect against pregnancy, believing that it is useless in protecting against HIV. Clearly this belief is not accurate nor is it well thought out. It points to an important disconnect that exists between protecting for pregnancy and HIV infection in the minds of some young adolescents. Thus in many instances, abstinence was cited as the best and most reliable form of contraceptive. It is difficult to assess whether or not this response was given because it was believed to be the "correct answer" or if they truly believed that abstinence was a realistic option available to them (given peer pressure as well as the submissive nature of girls in Ugandan society, abstinence may not be a realistic option). The concept of abstinence among Ugandan youth is further explored in other topics (Religion and Sexuality, Female Assertiveness).

The mistrust conveyed towards contraceptives was based on a number of factors, including misconceptions about condoms and pills. These misconceptions will be explored in a separate section. Misconceptions such as the fact that condoms have holes in which the HI virus can pass through or that birth control pills can cause a person to gain excessive amounts of weight will clearly influence not only the type of contraceptive that is chosen, but in fact, whether a form of contraceptive is chosen at all. It is important to point out that condoms can form holes during

usage due to breakage, or that starting on the pill can cause a slight weight gain. However, the study participants concerns were exaggerated, suggesting that the holes in condoms already existed (tiny holes in which the HI virus could pass), or the birth control pill caused an unusual amount of weight gain.

There did seem to be a preference among adolescents to choose condoms over the birth control pill. Despite the reservations they had about the condom, they still felt it more practical and safe than birth control pills. More ideas on contraceptives are expressed in the section titled "Knowledge".

Some of the other concerns expressed over contraceptives involved the mechanics of condom use. Students expressed the concern that there is a chance of the condom being used improperly, the boy not knowing how to use the condom, or use of an expired condom, which would then expose them to risk, despite taking precautionary measures. This mistrust extended to the shops where condoms were sold, where many students felt that shopkeepers did not have the knowledge, or simply did not take the initiative to adequately monitor expiry dates, or properly store condoms, thus putting the buyer at risk. Stating these facts did demonstrate that adolescents have a good understanding of some of the important mechanics of condoms, suggesting that they are aware of some of the important precautions needed to protect themselves. However, there were still instances where some of the information that they perceived as accurate was in fact not truthful. For example, occasionally students would bring up concerns that Uganda received faulty condoms in comparison with Western nations, or that Uganda's condoms were already infected with the HI virus (in the lubricant on condoms.) A couple of students expressed the opinion that condoms were meant for those who are promiscuous, and not necessarily appropriate for use by "proper" individuals:

"1-29-R3) For me, I think a condom was meant for those people, used by mobile women or men because for those one who go in discos, when you reach in there, there is a girl who is drunk, he tries to do what rape…"

It is interesting to note that many of the students when asked specifically about condoms, had comprehensive explanations as to why they believed condoms were not effective. This ranged from conducting their own experiments on condoms (i.e. pouring water into them to see if it passed through) to citing studies that they had heard about, or seen on television about the effectiveness of condoms. Many students used the phrase "condoms are not 100% effective" which is in fact true, however, their explanation as to why condoms were not 100% effective was in most cases, lacking in factual, reliable, data.

Mistrust of relationships.

The idea of mistrust is one that is not common in the literature. Past studies which discuss the issue of mistrust largely focus on mistrust in relation to contraceptive use. However, focus group results showed mistrust arising on a number of levels between males and females, including interpersonal matters, infidelity, and contraceptive use. Generally speaking, among focus group participants, males did not think females were trustworthy and females did not feel males were trustworthy.

Primarily, trust arose as a concept on an interpersonal level, whereby, girls felt boys could not be trusted to remain faithful to one girl, and boys felt that girls were easily swayed to other relationships. While the male's impetus for cheating was based on a desire for other girls, female's impetus was based not only on desire, but monetary gain as well:

"1-14-R7) In fact, when I begin a love affair with a lady, I may not necessarily trust her, see these ladies need a lot of money, so she can't even become faithful to you because of money, so what I can do is to just use condoms even though I spend about three years with a lady and I see that she is in good moods with me, I would still use the condoms, such that after my studies we can marry each other, if I actually trust her and the reverse is true."

It seemed to be a common occurrence, in fact almost an expectation, that infidelity could arise as an issue. A few young girls stated that even if they asked a male to have an HIV test at the

beginning of the relationship, they would ask again before engaging in intercourse because the boy may have cheated in the interim. Youth occasionally stated a reason for abstinence, as being that once they began intercourse, they could not always be available to their partner to fulfill sexual desires, leaving their partner to then find means of fulfilling desires elsewhere. Thus sexual activity would indirectly act to promote infidelity.

The general feeling of mistrust between the sexes can potentially create a sexual environment in which sex is carried out with caution and without the emotional comfort level that is common to healthy relationships. While it can lead to adolescents taking greater precautionary measures, it can also create a false premise upon which to condone violence, anger, or other adverse behaviours.

When asked specifically about contraceptive methods, students made a number of comments that centred around the issue of trust. First of all, many girls cited one of their reasons for not trusting condoms to be that boys could get jealous and put holes in the condom, an idea also cited in the literature (Pool et al, 2000). Thus it may not be the condom itself that they did not trust, but the user of the condom. This idea is furthered by young women's comments on not trusting the boy to know how to use a condom and thus risk passing infection or causing a pregnancy. Furthermore, girls often stated that in preparing for intercourse, boys could say that they are using a condom and that they have put it on, when in fact they have not. In African culture, sexual activity takes place in complete darkness, so the woman cannot witness the man going through the act of putting the condom on, and must simply trust the man's word (Kipp, Personal communication, 2004).

Another idea that emerged in discussion was that contraceptive use depended on the trust level in the relationship. The literature on condom use among adolescents in sub Saharan Africa suggests that condoms act as a symbol of mistrust, and that adolescents feel condoms are unnecessary in steady relationships (Macphail and Campbell, 2001). When asked specifically if the contraceptive method depended on the type of relationship, many students felt that as the

relationship grew to be long term, it was more appropriate to change methods to the birth control pill, as condoms symbolized limited trust of your partner, and were more appropriate for newer relationships where trust was yet to be established. One student mentioned that the condom had no sweetness, an idea that exists in other parts of sub Saharan Africa (De Bruyn, 1992). Students felt that if you trusted one another, you would use pills:

"2-21-R9…I would prefer using pills because at least people have told me that at least if you use a condom you will not feel good sweetness. I have not experienced this, but I would prefer using a pill, because if you were to have your girlfriend and you really use her, you will need to get the best of the best..enjoy the best of the best (laughter) so I would prefer using pills, the relationship stays if we are trusting each other, I don't think she has HIV or myself, we are trusting each other and become one (laughter from group). So she uses pills and we meet in that case, we are avoiding pregnancy."

Some felt that their partner could not be fully trusted and preferred to continue with use of condoms, while others simply preferred condoms no matter what type of relationship they were in because they did not feel comfortable with other contraceptive forms, or continually changing contraceptive forms.

"2-5-R4) Me, I never trusted even boys, at our age. When he sees you, the way I see you is the way you see another so I think I would fear he has another girlfriend or maybe more than one, so I think I would prefer using a condom (i.e. the boy's attraction is fickle and easily tempted by other girls)"

In regard to the female suggesting protection, males saw this as the female attempting to protect the male from HIV infection or as an indication that the girls suspected them of being HIV positive. While a number of boys saw it as a sign of responsibility on the part of the girl, many viewed the idea of females suggesting contraception with wariness:

"1-17-R5) Ok, definitely, if a girl tells me to use condoms, I must respond because also I have a hope that she may be having HIV and she does not want to spread that to me, and therefore if she tells me to use a condom, I have to protect myself, therefore I can respond…"

The idea of females suggesting protection in Ugandan society has been documented as a sign of promiscuity and unfaithfulness, as well as possible infection (De Bruyn 1992, Giffin and Lowndes, 1999). The suspicion that young women must endure when simply suggesting

protection for intercourse, acts as yet another barrier to adolescents effectively protecting themselves. It essentially leaves one partner (the male) to decide whether or not protection is used, and leaves the women vulnerable not only to risk of infection or pregnancy, but also to gossip and labelling if the male discusses his thoughts with others. However it is interesting to note that when students were asked who should be responsible for protection, the majority of students answered that they felt both the male and female are responsible. Many thoughts were expressed in support of both male and female considering protection, including the fact that one might have the knowledge and the other might not, both stood to suffer adverse consequences, and that one might be unfaithful without the other knowing. However, it is questionable whether both parties truly can suggest contraceptive use given the difficulty young women face when suggesting protection (Harrison et al, 2001, Nyanzi et al, 2000). While most males felt that both parties should be responsible for protection, it was not made clear whether or not they would accept responsibility if a pregnancy occurred despite said protection. Past literature has found Ugandan male adolescents to unequivocally believe pregnancy to be the responsibility of the women (Hulton et al, 2000), despite the present study's finding that protection is the responsibility of both. The concept of female negotiation of protection is further explored in the section titled "Embarrassment and Shyness".

Role of parents.

In the face of a changing family structure, the role of the Ugandan parent in respect to adolescent sexuality has become increasingly ambiguous. In Ugandan tradition, the parent played a minute role in the sexual matters of the child, as this role was reserved for the senga (paternal aunt) (World Bank, 2001; Betts et al, 2003; Muyinda et al, 2003). It was not common for the parent to discuss sexual matters with the child. The senga was responsible for teaching the adolescent about all matters related to sexuality at what was considered the "appropriate" time--before marriage. However, in modern Uganda, extended families no longer live within

geographic proximity. Add to this the fact that most fathers and mothers, as well as aunts and uncles, increasingly work away from home and have reduced availability (Personal communication, Rugaju David, 2003; Adinma, 2000). This results in a gap in the parental figures that influence the child's behaviour. While the role of the senga has been reduced or eliminated, no credible adult has filled this role.

In many instances, adolescents feared the repercussions of having their parents find out that they were pregnant. This was largely due to the fact that they felt their parents would feel disappointment and anger. Many students felt that upon learning of a pregnancy, their parents would not allow them to stay at home and would abandon them both in a parental and financial sense. Also, they felt that their parents would not be happy to find out that they were engaged in sexual activity at a young age. Among young boys, there is a fear of retribution from the young woman's side in that they will press charges against the boy for impregnating their daughter:

'2-R7-29) If I had a girl and she became pregnant, I would feel very worried because of same reasons. Maybe if I become 18 and have a girl who is pregnant and she is below 18, I fear that instance of getting arrested.'

One student encompassed the views of many young people, explaining why she preferred to use condoms over birth control pills:

"1-3-R9) Students should use condoms, they may not be happy on those pills. At least with condoms you use it and throw away, but with pills you have to keep it and your parents could find (*SC asks if your parents found it they would be upset—why?) And students reply:* At that time they would know you are starting to have sexual intercourse and you are still a girl, still in school. When your parents learn that you are having sex they know that deteriorates your academic performances because when you look at people much involved, their performance is not good, so when they learn that you have started that act, they know that your performance will deteriorate."

The element of secret keeping, which will be further explored later in the chapter, is explained in part by the fear of parental admonishment.

It is also important to address the parent's own feeling of discomfort in addressing the adolescents' sexuality. Basically, the idea that discussing sexuality promotes sexual activity is a hindrance to open discussion on sexual topics. This idea was clearly outlined in an interview with a representative from the organization, Parents Concerned. The results of these interviews are summarized in the next section. While parents of course feel the need to protect their children, they find it difficult to address their child's sexuality, believing that discussing it will increase their child's sexual activity. This idea is outlined in the literature not only in regard to parents, but other adults important to the adolescent realm, such as health care workers (Langhaug, 2003). There is also a doubt as to whether parents are actually credible sources to answer their children's questions, as in many cases they are not well versed in reproductive matters (Ngom et al, 2003). In an age of modernity, complete with internet, computer technology, increasing western media influence, and (especially in boarding schools) peers that have come from larger cities, the gap between parental and child knowledge seems to be steadily increasing. This is not much different than the generational gap seen in developed countries whereby "parents just don't understand." However, it can be assumed that larger barriers, such as illiteracy of parents, or parent absenteeism due to illness or death is much more pronounced in the Ugandan setting, therefore creating an even larger disparity between parental and adolescent knowledge.

Some students did however feel that they could and would go to their parents with questions on sexual topics. Parents, just like religious leaders have the ability to nurture an open relationship with their children and create an outlet by which adolescents can express their sexual concerns. However, this requires overcoming formidable social and cultural barriers relating to the role of the parent versus the role of the child. Parents are faced with a struggle to achieve balance between viewing the adolescent as a young person who needs continued and consistent guidance, versus the adolescent as a changing and maturing individual who has sexual desires and a need for sexual expression. As Nzioka (2001) points out, adolescents needs to be addressed as

individuals with sexual needs and rights by the larger society. The parents' role has the ability to provide protection to adolescents in preventing them from engaging in risky sexual behaviours (Ngom et al, 2003; Resnick, 1997).

Value of fertility.

Young African women are raised within a culture that highly values and celebrates a women's fertility (De Bruyn, 1992). Many of the young girls interviewed demonstrated this belief in their statements. When asked if they would still want to have a child if HIV positive, many responded that they would in fact have a child, and then referred to the value of leaving behind a legacy, or someone to be remembered by:

"R8) I may want to produce a child even if I am infected ok because when I die, I leave that to my fellow relatives, they may keep remembering me, when they see him or her, "this one is the daughter of (name) and they keep on remembering me"

This attitude was also echoed by young men. While some students did reflect on the fact that the baby would have a difficult life and could be infected, as well as show concern for who would take care of the baby, others felt strongly that in the event that if they were to be infected in their lifetime, their parents could look after the child after they were gone, and as long as there was someone to take care of the baby, they would go ahead with the pregnancy. It should be made clear that entrusting the parents with the child did not necessarily demonstrate an increased comfort level with parents. When answering the question, most youth assumed that they would be having the child later in life and not in adolescence, thus assuming their parents' approval and support. This concept of having a child at a socially acceptable age is further explored in the section on Practical Considerations.

At the time of the study, the Ministry of Health was promoting the Prevention of Mother to Child Transmission of HIV Program with regular radio ads. These advertisements were often cited by school adolescents who said that they had heard "something" on the radio and would go

to the hospital seeking out assistance if they became pregnant when HIV infected. Many youth felt that going to the hospital and receiving drug therapy so that the baby would not be infected was a readily available and simple solution. They fully believed that this was a credible solution, despite being vague on important details, such as rate of mother to child infection with medical intervention, as well as cost and accessibility of medication:

"1-42-R4) For me I can wish to have a child because they say that a girl who is having a child can produce a baby who is HIV free, when they produce a baby through proper doctors, because there is this program Prevention of Mother to Child Transmission of HIV. The mother can produce a child very simply without getting HIV. So when I leave behind my child, I would not have died completely, I would have left a person in the world"

A number of students felt strongly about going ahead with a pregnancy, knowing the risk it could pose to the baby. The fact that adolescents are willing to carry out a pregnancy that has a chance of adverse consequences to themselves as well as the baby is suggestive of two things: 1) It may mean that they are unable to fully grasp the fact that they are putting another human being at risk of infection, given that they are speaking only of a hypothetical pregnancy or 2) adolescents are brought up to value the act of child bearing as an important contribution to society, and will not easily part with that idea, despite the chance of infection of the child. This latter idea is echoed in the writing of Mill and Anarfi (2002) who discuss that fact that HIV infected women may proceed with a pregnancy, knowing the risk to their child, in order to fulfill the societal expectation to bear children.

Spirituality and religion.

Religion is an important institution in Ugandan society and Christian ideas and values have an impact on many young people's sexual decisions. As Kaleeba et al (p 58, 2000) point out, "Religion is inextricably woven into every aspect of life in Uganda. For most Ugandans, religious beliefs play a major role in their sense of personal identity, their thought patterns, their moral judgements, and their perceptions of disease." Religious ideals have the ability to

influence adolescent sexual decisions and seemed to do so as illustrated by focus group discussion.

Students who proposed abstinence usually mentioned their belief in God and their desire to adhere to religious values. Thus an important influence for choosing abstinence was religiosity:

SC) Lots of you say that you feel comfortable waiting to abstain. But don't you feel like that is difficult sometimes because all of your friends are trying it out and talking about it?

"2-15-R7) See some of us are seriously religious, and we know how to go about with such temptations. We pray and pray to our Lord Jesus.

Becoming pregnant or acquiring HIV infection were often seen as acts that required God's forgiveness:

"2-R6-26) The question is if you had AIDS at this particular time, what would be the best option…it is not that people who have AIDS go pray to God and get cured, but that is one option, to put your hope in God and once you put your hope in God anything can happen. That woman brought the proof, put her faith in God and she was cured. I am not saying go and have sex unprotected and you will be cured. But you can't say God won't forgive you after having sex before marriage because as long as you are on this earth and you repent before you die, God can forgive any sin at any time"

Additionally prayer and faith were viewed as acts that would produce comfort, strength, and in some cases, even lead to a renewal of good health. A few students cited instances, where they had heard of men and women who through prayer had rid their body of the HI virus:

"2-R6-25) To me, after knowing I had AIDS, I would turn my hope to God because one time within prayers in a certain cathedral, a certain lady was having AIDS in her secondary education and she showed the test and she proved now through crusades, she is now old and is HIV negative now. After getting AIDS, she put her trust in God, that one tells me that God can also work and make me live… and in the same way I would go and consult doctors and health workers. I can survive with tablets that extend my life.. I can go on living with AIDS. I wouldn't want people to know it that I have AIDS"

Despite the fact that two of the schools used were in fact Catholic institutions, it was difficult to identify clear differences in opinion around condom use among the schools. However, more of the Catholic school students reacted to condoms with skepticism and doubted their ability to

protect against HIV and pregnancy. One male student in a Catholic school explicitly mentioned not wanting to use condoms because of religious beliefs based on condoms as a sign of premarital sexual activity:

"2-17-R7) "...But again from the spiritual angle and the religious point of view, I don't really consider using a condom because I know I am not supposed to have sex at this time..."

The role of religion and its influence on adolescent attitudes towards sexuality results in a number of outcomes. Primarily, it results in the belief that abstinence is a moral decision, one that prudently obeys God's command. While abstinence is viewed as a positive action, the view of abstinence as moral must then lead to the idea of sex before marriage as immoral. Thus those who engage in premarital sex must deal with feelings of guilt, the desire to hide their actions, fearing judgement from not only God, but fellow Christians. As pointed out in the literature, if the sexual act in and of itself is something to be held secret, then an adverse outcome that resulted from sexual behaviour, whether it be pregnancy or an STI, would be a visible sign of immorality and be viewed with shame and disgust (Takyi, 2003, Joffe and Bettega, 2003). Secondly, religion and spirituality influence condom use. Aside from the prohibitive view of condoms that is held in the Catholic church, for both married and unmarried individuals, most churches in Uganda view premarital sexuality in a negative light. Macphail and Campbell (2001) discuss the fact that when practiced, sex among adolescents is illicit and hurried and the use of a condom can be seen as a waste of time.

However there are positive outcomes derived from the role of spirituality and religion in young people's lives. While fear of judgement does produce a great deal of guilt, religiosity can also produce a form of accountability, where young people will reflect on their decisions more, given the fact that they do not want to lose the respect of fellow Christians and in the eyes of God. In addition, religion allows young people to foster hope through prayer and faith. In the event of early pregnancy or HIV infection, they feel that they not only have someone to turn to, but that there is still a chance for positive outcome from negative consequences. The idea that

religion fosters social bonds and promotes responsibility is cited in recent literature discussing religion and sexuality (Garner, 2000). Some of the students interviewed felt comfortable approaching religious leaders for advice on sexual topics. This role must be reinforced, and religious leaders must capitalize on their ability to foster hope rather than procure judgment, thus creating a societal outlet for adolescents to seek assistance. Kaleeba et al (2000) cite the increasing numbers of priests, ministers, imams and other religious leaders who are attempting a non-judgmental approach to the issue of HIV and condom use, pointing to the fact that perhaps religion is beginning to realize its potential to achieve change in Ugandan society.

Knowledge

The issue of imparting sound knowledge can be identified as one of the most prominent and important themes in creating a healthy environment for adolescent sexuality. Focus group data reflect that in all cases, while students seemed to demonstrate a considerable degree of knowledge in a number of key areas dealing with sexual health topics and contraceptives, they still held onto beliefs that were inaccurate. In addition, while in many cases, their knowledge level seemed to be high, there were still key gaps in the knowledge base. While some of the literature has pointed to adolescents having a sound knowledge base in certain areas such as HIV transmission and susceptibility (Kipp et al, 1992), other studies have identified a lack of knowledge among Ugandan adolescents, specifically in regard to contraceptives and effective protection, to be an issue (Hulton et al, 2000). Inaccurate beliefs and knowledge gaps serve as barriers to young people because they put them at a high level of risk, almost comparable to someone who has no information at all. For instance, knowing that condoms exist, but not knowing how to use them is incomplete knowledge that is not helpful in achieving protective behaviour. Adolescents are unable to benefit from the positive knowledge that they have gained because they are hindered by their lack of understanding in crucial areas of understanding. The literature to this point has recorded the benefits of a sound knowledge base, and included many

recommendations for improving adolescent education (Adinma et al, 2000; Bajos and Marquet, 2000). General education and sexual education within the school curriculum have made formidable declines in the HIV prevalence among young people (particularly women) in Uganda (Kilian et al, 1999). However despite these achievements, study data suggest that gaps in knowledge and misconceptions continue to hinder young people from adequately protecting themselves.

It is impossible to assess an adolescent's knowledge base without paying particular attention to the information sources to which students have access. When asked specifically where they would go to ask questions about sexual topics, a wide range of answers were given. Students cited: health workers; parents; teachers; friends; siblings; significant other; as well as sources like the Straight Talk radio show; or Straight Talk magazine (a source which deals with adolescent sexual health and is specifically targeted at young people) as information sources that they used. While some of these sources are credible, others are not, and still others, which would be considered credible, upon further analysis are found to be questionable. For instance, during one focus group session, a young boy asked if it is true that there is a soap that can restore virginity. When asked where he had heard this information, he replied that he had read an article in one of the local newspapers circulated throughout Uganda. The research assistant verified that she too had seen the same article. Another student mentioned that he had heard on the radio that condoms contain holes. Instances such as these reflect the fact that there is a need to be vigilant in ensuring the accuracy and credibility of sources on sexual health. In addition, while it would seem that adolescents have a wide range of information sources that are available to them, and that they are comfortable with, this is not always the case. Students did mention that they would feel uncomfortable to run into counsellors or health workers outside of the clinic, after having shared confidential information. Another student mentioned that she respects her mother too much and "fears to ask" about sexual matters. Still another student said that she would use the method of raising a sexual matter as a joke, due to her discomfort in asking straightforwardly, and

then assess the different responses she received for pertinent information. Creating sources with which young people are comfortable to use continues to be a challenge in Ugandan society.

Gaps in knowledge.

The knowledge gaps that were demonstrated in focus group discussion largely reflect the literature which cites adolescents as lacking knowledge in a key number of areas, including reproductive biology, risky sexual activities, facts about pregnancy, maturation processes, and negotiating sexual relationships (World Bank, 2001).

Gaps in adolescent knowledge were assessed largely through questions asked by young people throughout focus group discussions, or in the question period that closed each discussion. They are identified as gaps because there is an absence of knowledge rather than an incorrect idea, which, for the purpose of this study, is classified as a misconception. Questions covered a large range of topics, including women's reproductive cycle, especially in regard to menstruation, as well as modes of HIV transmission, and contraceptive use.

"Is it true that AIDS can be spread through oral sex?"

"How long does the HI virus live outside of the body?"

"Why do you get pain during menstruation?"

"Are some condoms stronger than others?"

Questions such as those listed above show that adolescents have curiosity about a wide variety of topics and generally felt comfortable asking these questions to the moderator and research assistant, both of which are positive findings. However, the questions also serve to demonstrate that there are a number of areas in which students are still missing key information that will assist them in protecting themselves from infection and early pregnancy. It can be seen by questions regarding HIV transmission, that in many cases, elementary knowledge necessary to

prevent the disease is still largely lacking and is not being uniformly disseminated among urban secondary school youth. Similarly many of the questions from young girls reflect that the knowledge they have of their reproductive cycle is superficial at best, as many are unaware of the characteristics of the monthly cycle. Questions on contraceptives further reflect the scepticism adolescents feel towards measures of protection. Some of the questions raised suggest that knowledge on sexual health is perhaps focused specifically on the biology and physiology of reproduction and omits the important interpersonal and emotional aspects of forming relationships with the opposite sex:

"I don't have a girlfriend, what is your advice, should I get one or not?"

"Sometimes emotions may overtake you, you feel like going with them for sex, and you don't have any means, you don't have a condom, and you really feel like you should do it at that moment, what can you really do to overcome that?"

In some cases, questions were asked on a moral level, seeking condonement of particular behaviours:

"At our age, are we supposed to play sex, is it bad?"

There was also one question that dealt specifically with the problem of older adults pursuing younger adolescents and the problems that arose in attempting to communicate with individuals who did not have the same knowledge level on sexual topics:

"In case you are on holidays, and you find that you have got someone harassing you to get involved in sex with her...what are the measures you can take? In case she is a sugar mommy trying to pursue you? These are illiterate people, never went to school and never listen to Straight Talk"

Thus, knowledge gaps go beyond mechanics of contraceptive use and HIV transmission to include important emotional, social, and interpersonal dilemmas. The fact that students were willing to open up to relative strangers and discuss highly personal issues, illustrates that there is

a need for role models who can offer advice that they are willing to follow, and who empower them to make positive choices in regard to sexual decision making.

Misconceptions.

Adolescents in most focus groups held a wide array of misconceptions. Most of the misconceptions stated around condoms and contraceptives corresponded to those found in other studies conducted throughout sub Saharan Africa, suggesting that many of these ideas are not specific to Ugandan adolescents (Nzioka, 2001; De Bruyn, 1992; Maswanya et al, 1999; Ackermann and de Klerk, 2002).

Misconceptions for the purpose of the study are defined as those instances whereby adolescents hold some type of idea about a topic on sexual health, however, it is an incorrect idea. While some might be considered relatively harmless, it is important to realize that these misconceptions in actuality form the individual's concept of reality. Outside of the few instances where misconceptions were raised as a question for the purpose of clarification, for the most part, misconceptions were raised as a logical part of the response to a particular question. Thus while to the moderator, an idea may have seemed far fetched and impossible, to the focus group participant it was in fact considered truth. This truth is used, just as any other factual data, in constructing the young adult's decisions. It is difficult to ascertain how these misconceptions come into being, however, once they are formed, they become a part of the adolescent dialogue on sexual health. In many ways, misconceptions prove to be a greater challenge than a gap in knowledge, because unlike a gap in knowledge, which can be filled in with relatively little explanation, a misconception must first be assessed for how it was constructed, and subsequently deconstructed, which entails changing the adolescent's currently held belief, and what they are exposed to in their immediate environment among peers, teachers, and possibly even within their families. Regardless of which school we visited, whether it be day school or boarding, mixed, or single sex, each school had focus

group participants who raised similar misconceptions. Misconceptions around sexual activity and contraceptive use represent a credible challenge in changing adolescent sexual behaviour.

Some of the most common misconceptions held by students dealt with contraceptives, especially condoms and birth control pills, as illustrated by the following statements:

"2-18-R9) I have heard many people prophecy that condoms are good what, especially the government on radios you hear them advertising that condoms are good and that they stop pregnancy and the like... I made a good observation. I found that I shouldn't use a condom. I shouldn't because in the research that I made, I asked several people, they said when you use a condom for example we boys, your penis may not be all that big enough to accommodate the size...it may not fit you, may not be big enough. One of them told me if you are not careful, it may skip and go into the vagina of the girl with the sperm. I find that situation can be confusing...so I still doubt if I use it, I may get AIDS and all those things make me conclude that the condom isn't good."

"1-38-R7) On my side using condoms with my partner for a long time is bad, because you can get diseases from using condoms like cancer, but my partner can get blood checkups [i.e. HIV test]...then can go for injections [injectable birth control]

Ideas such as condoms cause cancer, condoms can get stuck in the vagina of the women, and condoms can be of improper fit demonstrate that many adolescents are not fully aware of the mechanics of condom use. As mentioned in the section titled "Mistrust Contraceptives", these misconceptions prevent adolescents from fully trusting condoms and could potentially lead to them not being used. Given discomfort with using condoms, one would expect that another contraceptive form would be more popular with students. However, the other most common and accessible form of contraceptive, the birth control pill, also carries with it a number of falsely held beliefs:

"2-4-R6) I would also feel like using a condom because like my sister (fellow FG member) I've also heard side effects about pills because sometimes I hear people saying that when you are in your periods, you may overbleed, or when you take them when you are thin, you become so fat, or they make you lose appetite and you become very thin"

"2-21-R5) With me, respective of time, I would actually use condoms, because pills are too dangerous for the girl...if she overuses pills, it may lead to barrenness...which is a very very dangerous thing"

While weight gain and difficulty conceiving may be valid concerns, the manner in which these comments were made suggested that young people felt them to be an extremely adverse risk, over and above that which is medically proven. Misconceptions involving the birth control pill included the fact that it would deform the baby, cause excessive weight gain or weight loss, increased bleeding during menstruation, or burn the woman's ovaries. These ideas were held by males and females alike. Once again, fictitious thoughts hinder adolescents' ability to fully trust contraceptives and subsequently affect their contraceptive decisions.

Once again, it is interesting to note that in some instances, adolescents will use the sources of information available to them, or create information, through their own analysis, to validate their theories. One young boy gave the following account of how he came to believe that condoms are not a valid form of protection:

2-31-R7 "What I think about condoms. Condoms are not actually very safe…okay they are made of rubber and rubber has what holes in it, so and if you were to measure the angstroms of sperms they are very big in compared to the holes in the condom…so condoms protect from pregnancy, but don't protect the HIV virus because for its case, if it is to pass through the hole of the condom it will just spread and pass through the condom, but it is according to the way you will use it, maybe it will protect you from HIV, the probability is half, 50/50"

As mentioned at the introduction of the section, there is also the issue of supposedly reliable sources giving misinformation. Two specific instances arose where students cited false information that was given to them by their teachers.

"2-20-R9)… One of them told me if you are not careful, it may skip and go into the vagina of the girl with the sperm. I find that situation can be confusing. One of our teachers in primary told us that there was a girl and boy and it happened to them and they were frustrating not until they went and reported and of course before that punishment was availed. So you find all those things, then they show that it is not 100% correct, so I still doubt if I use it, I may get AIDS and all those things make me conclude that the condom isn't good."

2-34-R3) "The teacher said that if you feel pain during menstruation, you have a wound on your ovaries?"

It is important to monitor the information that is disseminated not only amongst students, but amongst adults with whom they have contact as well. Clearly, if they are receiving information from adults in positions of authority, students will be more likely to believe it. This creates a form of reinforcement for misinformation.

One of the questions explored during the focus groups was around the concept of dual protection. This is an important aspect of the study, not only because it explores an area not largely seen in previous literature with African adolescents, but because the concept of dual protection is one which emphasizes the relationship between protecting for both pregnancy and HIV in an effective manner. Given the use effectiveness (in preventing pregnancy) of condoms, and the many factors involved in their proper use (such as expiry date, proper storage, mechanics, etc.), dual protection has the ability to decrease the probability of HIV infection or pregnancy. Adherence in using dual protection would allow young people to further protect themselves. One of the problems encountered with this question was the fact that students did not understand the phrase dual protection, as it was not commonly used in everyday language. However, even after dual protection was defined, most students did not understand its relevance, and it was not uncommon for most students in a focus group to reserve comment based on their limited understanding. Some students felt that it was redundant and unnecessary to use two forms of protection. This opinion is summarized by the following statement:

1-10 R4 "If you are using pills to prevent pregnancy, at the same time using condom to prevent both, so why apply two?"

The issue of trust also arose with dual protection, whereby the female would use another form of protection because they did not trust the male to put on a condom, or know how to use a condom. The lack of knowledge and misconceptions surrounding dual protection must be corrected if it is to become a realistic option for Ugandan teens. There is a great need to further address the potential of dual protection as a protective concept, among family planning clients, STI clients, and the population at large (Kleinschmidt and Magwa, 2003).

Conversation has been quite limited in Ugandan society in regard to sexual acts other than intercourse. This is yet another area where the literature is lacking. Acts such as masturbation are still clouded by misunderstanding. Straight Talk Magazine has printed some information on masturbation, however this seems to be one of the few sources that speaks openly about it. The importance of masturbation in alleviating sexual tension, or allowing young people to curb sexual desires has yet to be fully explored, however comments in focus group discussion point to the fact that limited dialogue on the topic has led to some confusion. Interestingly, girls did not ask any questions in regard to masturbation. Even among males, comments were limited to a few questions. Perhaps if a question had been included within the discussion, more dialogue could have been generated with both sexes. A few males commented with the following statements in which they believed that the release of sperm from the body could potentially decrease the viral count that existed within the body. This points to misunderstanding not only of the act of masturbation, but also the process of HIV infection and the course of the disease:

"Don't you think that masturbation can reduce the number of viruses in the body?"

"This Straight Talk Club say that when you feel emotions, you revert to masturbation...what is that? Is it good, can it bring some HIV? But I think that it is impossible because when you are with a partner, you can't apply that"

Positive thoughts.

One of the aspects of focus group discussions which stood out as notable, given that it was not explicitly found in reviewed literature, was the number of comments that reflected positive attitudes towards the possibility of adverse outcomes from sexual behaviour, especially in regard to HIV infection. It seems that many students had a solid base of accurate knowledge around contraceptives as well as community health services that are available to them. Students in Kabarole have been shown to have a solid base of knowledge around HIV transmission and susceptibility (Kipp, 1992). As well, survey results published in 1995 showed that the majority of

Kabarole secondary school students believed condoms provided effective protection and intended to use them with new partners, and were in agreement on the importance of discussing past sexual history (Abraham et al, 1995). However, as mentioned before, it is difficult to assess whether or not these positive attitudes represent a realistic portrayal of actual behaviour. For instance, when asked how they would feel if they were to become infected with the HI virus, many students responded that they would not worry too much and go about with their lives, perhaps joining The AIDS Support Organization (TASO[1]). While their willingness to join local support groups and gain assistance is a positive step, they do not address how they plan to procure the finances to pay for antiretroviral drugs (even at a reduced cost), or how they will gain the comfort level to seek out assistance. Additionally, it is not clear how young people would address issues such as transport, given that TASO clinics are not located in Fort Portal.

One possible explanation of the apparent optimism is that young people are speaking of the event of HIV infection in a very hypothetical sense and therefore cannot fully appreciate the effect it would have on their life. The number of negative comments received in regard to the possibility of pregnancy, reflect that pregnancy seems to be a much more realistic issue for young people, and an event that they believe could have immediate and detrimental effects on their futures. Adolescent attitudes may also be explained by a type of "information overload" whereby with constant awareness messages being directed at them, they feel they have received adequate knowledge to be able to handle particular sexual situations and thus perceive a decreased sense of risk. However, it could also be that the knowledge they have gained up to this point has allowed secondary school students to see HIV infection and to some degree pregnancy, as a less catastrophic fate. Thus, in the event of infection or pregnancy, perhaps students are realizing that there are avenues available to them for guidance and assistance and that they are not forced to go through the problem alone. Regardless of what adolescents' thinking is on this issue, it is

[1] The AIDS Support Organization is a local Ugandan organization that assists HIV infected individuals with counseling, and therapy at a reduced cost

important to point out those instances where adolescents feel that they have the ability to solve adverse situations and create positive outcomes.

The following comment illustrates how one student feels about the possibility of HIV infection:

"1-39-R4) If I happen to get AIDS, I just continue with my education, since an AIDS victim can live for more than ten years, so I could proceed with studies and afterwards start working, and join TASO for more help such as medicine and food, and afterwards I get saved so that I can be spiritually safe"

"1-19 R8) Basically if I acquire AIDS, I would tell my parents, and maybe doctors because these are the health workers who offer good counselling, they may tell you if you acquire AIDS, eat foods like these ones, and tell you for this period you should always do this, maybe check your blood, take these tablets, so that you may last longer and maybe when you are back at home, your parents will also help, when you don't tell them, you may suffer much....*So it's better to tell your parents, you think?* Yes."

The first statement reflects the adolescent's willingness to live positively with the disease and continue as a contributing member of society, an issue that becomes increasingly important given that the effects of AIDS are being most widely felt by the working populace. The second statement reflects the students' willingness to seek out positive sources of advice and assistance.

Many students brought up the important point of remaining abstinent after infection and not spreading the disease to others. Some students felt that engaging in sexual intercourse after infection would put them in danger by adding "more viruses" to them. It is not clear whether this refers to acquiring varied strains of the HI virus, or whether they believe that the quantity of the virus in the body is affected by the number of sexual partners one has. A few students brought up the issue of people spreading the virus as an act of revenge as illustrated by the following comments

2-6-R9) If I've been faithful to him, and then I see he has brought it, then I would also revenge at least...and try to spread it to some other people (laughter from group) *You would try to spread it to other people?* Yes, because at least I've been faithful to him and he has brought it, so I'd also give it to some other people so we die in big numbers (laughter from group)

While there was laughter from the group to accompany this statement, suggesting that the group members did not take the young woman seriously, the idea of exacting revenge upon becoming

infected, or acting out of jealousy (in that you are infected and believe others should suffer a similar fate) has been cited in past studies conducted in sub Saharan Africa (Pool et al, 2000). It is not clear from where this attitude stems, however witnessing it among a young age group suggests that it is an entrenched societal idea that needs to be addressed. Despite this negative idea of spreading the disease, in many instances, students expressed their desire to protect others and to use their lives as an example so that others would not make the same mistake they did.

"1-18-R8) Getting HIV, ok some of us would be worried because once you have acquired HIV you don't fall immediately and die, because if you acquire AIDS today, you can last for about 15 years without falling sick even. You may get some headaches or fever, but you won't die immediately. So if you acquire HIV, the only thing is to accept these health organizations like TASO to always counsel you and you avoid spreading it to other members. When you feel you have desires, you protect yourself, not be jealous and spread it to other friends"

"2-25-R4- R4) We have seen many people with HIV/AIDS, they have managed to live longer when they say...okay if a doctor told me that I have HIV/AIDS I would ok feel the pain, but I wouldn't get worried so much. I would go for more counselling from the doctors and teach the young ones not to fall into the same thing the same act of playing live sex and getting AIDS, you would try to fight against AIDS by teaching the young ones the right methods"

While positive attitudes among adolescents must be encouraged, at the same time, it is important to ensure that adolescents have a clear and realistic portrayal of how sexual activity and adverse outcomes can affect their life. While students in many ways demonstrated a solid foundation of knowledge, continued education is needed not only on a factual level, but in terms of exploring emotions, hypothetical scenarios, and coping with difficult situations.

Behaviour

Views of sexuality and existing knowledge are further demonstrated in adolescent sexual behaviour. Behaviour is not simply reflected in sexual activity, but in all the various active behaviours that lead to a sexual act, including negotiating relationships and contraceptive use, accessing contraceptives, and considerations of practical matters that influence sexuality. In addition to these behaviours, adolescents also exhibit behaviours that are in response to existing

social norms and values. These behaviours are demonstrated through comments that refer to how adolescents believe others perceive them, and how they as young people, feel about demonstrating their sexuality in a society where sexuality is largely considered a taboo topic.

Embarrassment and shyness

One of the foremost barriers faced by young people in Ugandan society is the embarrassment they feel around sexual expression. Their embarrassment and shyness is intimately bound to the perceived societal attitude of disapproval towards adolescent sexual behaviour, and the pervasive idea that sexual activity is not appropriate at a young age (Brieger et al, 2001; Nzioka, 2001) The literature records instances of Ugandan adolescents demonstrating high levels of knowledge about condoms and having relatively positive attitudes about them, but expressing shyness in both discussing and accessing them (Kinsman et al, 2001; Abraham et al, 1995). Additionally, as reflected in study results, adolescents in reviewed literature expressed discomfort with the idea of discussing sexual topics with adults, and accessing condoms from venues where they might be known, since they were aware that sexual activity was not condoned (Nzioka, 2001).

It seems that demonstrating any action suggestive of sexual behaviour essentially conveys the adolescent as overriding his or her proscribed social role. This societal attitude translates into young men and women feeling shy, awkward, and uncomfortable in talking openly about sex, negotiating condom use, and accessing contraceptives, all of which are fundamental requirements of safe sexual behaviour.

Many adolescents, commented that if they were to become pregnant or make someone pregnant, that they would feel embarrassed. This is an extension of the feelings expressed in the section titled "Fear, Anxiety, and Worries", whereby students feel anxious about the possibility of getting pregnancy, largely due to the social consequences they would have to endure:

"1-25-R8) I think my side, getting pregnant is very bad because your parents and your family will not be caring my future anytime and anymore and I would feel so embarrassed in the presence of my parents and in the presence of God"

"2-15- R4) If it was like me, you had pregnated your girlfriend, you feel ...okay…pressure on your side, parents at home are not happy, friends, you feel deserted...what I think I would do, I would leave home. *You'd leave home?* Yes (emphatically). *Would you tell your parents why, or would you just leave?* No, of course they have already known what you have done, and they are not happy with you. They think you are in school and you have wasted money, you have pregnated a girl and you don't have the money to get up a kid at your age, and you feel deserted. *Would you tell your friends?* No it's really embarrassing, you can't tell your friends that…it's really embarrassing."

Adolescents feel pressure, shame, and desertion when they consider the possibility of an early pregnancy. The shame they feel in part comes from disappointing their parents, and becoming a misfit among their peers, but also from the larger feeling that they have engaged in improper behaviour for someone of their age. Adolescent anxiety towards these social consequences of early pregnancy has been documented in past studies in Uganda which state that the social, economic, and physical risks are especially felt by young women (Hulton et al, 2000). However, young men and women alike in this study, seemed equally concerned about pregnancy's immediate repercussions and how pregnancy could affect their futures.

Another key area where students exhibited embarrassment, was in regard to issues of contraceptive use. One aspect of contraceptive use that females especially found embarrassing was suggesting the boy use a condom before intercourse. One female addresses the fact that girls sometimes feel shy to express themselves to boys in regard to condom use:

"2-43- R5) Another problem is that girls are too shy. Maybe they think they will lose that boyfriend somewhere so just they tell you that they want to play sex and instead of refusing, maybe you are shy you don't want to tell him, and you enter in for sex and you get pregnant."

At one female school, when discussing the idea of a female assisting the male to put on a male condom, many of the participants expressed shyness in discussing the topic. This reflects a

general discomfort among women to suggest condom use, as recorded in previous studies (Harrison et al, 2001). However, the majority of the group said they would help if they had to, because they knew the consequences if they didn't, however, they would feel very shy. At another female school, the participants seemed to understand that if they were to succumb to shyness and not speak their mind, they would end up in a vulnerable position and have to give in to the male's demands:

"2-41-R6) Me if I had one, I would tell him about the demerits of HIV, getting pregnant and to tell him you must not fear…when you be shy it is as if you are calling him…I would tell him [to wait to have sex] after the studies."

"2-41-R7) For me I understand, most boys get advantage of shy girls, and playing sex. For me if I was the one and I had a boy lover or bf, I would call him aside and we discuss about HIV, unwanted pregnancy and after discussing about it in case he asks for sex at my age...I just advise him and tell him that it is still early and time is still there and we have to wait until we finish studies and that's when we can go into those things. *You wouldn't worry about telling him that, that he would go find another girl?* Let him go, there are many (laughs)."

Thus the demure and submissive attitude attributed to women was being challenged, and recognized as an attitude that led to women's vulnerability. This idea will be explored further in the section on female assertiveness.

Another activity that caused embarrassment, among males and females alike, was accessing contraceptives from public places, such as local shops and canteens. This is a common issue cited in the literature that stems from discomfort among adolescents due to negative community attitudes and perceptions, and a general lack of social support for adolescents when they seek out protective measures. (Langhaug, 2003, Adih et al, 1999). Students felt that if they were to openly buy condoms that they would be the object of gossip, and in a sense, "found out". It is important to mention that many of the shops and canteens in Fort Portal are located in crowded markets or are simply small shops with counter facing the roadside. This makes it very easy for others to see when one purchases contraceptives. Even in clinics, condoms were not

visible in places where they could be quickly and easily accessed. Thus the physical location of contraceptives served to add to the adolescents' embarrassment.

Occasionally, girls mentioned that they would leave it up to the boy to buy condoms because they would feel too awkward to buy them. Young people felt that when they took part in actions suggestive of sexual activity such as purchasing condoms, they would be looked at with disdain.

"2-22-R4… But for me it is shyness thing. You may be having a girlfriend here now, it is a mixed school let's say and you have a school canteen and there are some condoms sold there…you may fear to go and buy some condoms there. You may have money but fear that canteen attendant see you just take that one and say where is he going and for what…that influence may lead you to go bare and as a result….*Do you agree with that?* All respondents say yes. *Even when you don't know that attendant?* No you may not be knowing, but when you are buying condoms in your trading center or in your village. That person should be knowing either your father or your mother so after buying you go, the next day he tells other people the son of so and so bought condoms here."

Thus, encountering an attendant in a store who could potentially consider them with disapproval was enough to prevent them from purchasing a condom. This comment was made regardless of whether or not they knew the attendant. While in some instances, young people mentioned their concern that the attendant would tell others, and would know their parents, many instances of embarrassment were based solely on the idea that an adult would be aware of the fact that they are engaging in sexual activity, and consider them to be "ruined", not engaging in appropriate behaviours for someone of their age group.

2-22 -R4) When you buy those condoms, people lose hope in you—they say eh that one has started such and such...that one is out of the fellow age mates, they say, eh this one has started playing sex—even if they see it in your pocket.

There seemed to be a general feeling among adolescents that they could not trust others to keep their matters private, and that if they were to purchase condoms, they would be subject to rumors and gossip.

R7) I understand in this district of ours, people don't mind about their business, they mind about other people more than themselves. It would be possible to go and buy it for yourself, but because of people minding more about what you do than about themselves, it is not possible.

The fear of lack of privacy and confidentiality and discomfort in having adults judge their behaviour is an ongoing phenomenon with Ugandan adolescents, as evidenced by other recent literature which points to the same issue (Flaherty et al, 2004). Embarrassment and shyness emerge on a variety of levels, stemming from the common perception of how adolescents believe they are viewed within society. Anticipated social embarrassment acts as a key barrier to preventive behaviour enactment among Ugandan adolescents (Abraham et al, 1995).

Flaherty et al's study (2004) points to the fact that students largely support the idea of dealing with health volunteers who are their "age mates". This idea is further supported in data collected from health professional interviews, whereby youth leaders have pointed to the fact that adolescents are much more willing to divulge information and seek out assistance when they are dealing with their peers. Peer education will be further discussed in subsequent sections.

Finally, it must be noted that among the adolescents who took part in this study, the concept of peer pressure and status associated with sexual prowess did not emerge as expected. This idea of boasting of sexual activity would serve as an important dichotomy to the shyness and embarrassment expressed by adolescents. Past research conducted in Uganda has identified peer influence to be an important factor in adolescent sexual behaviour (Twa-Twa, 1997), however, it was only identified in one group of males specifically in response to a question about telling friends about sexual activity:

"2-24-R4) Having sex with a girl at times can make the person tell his friends about it to win prestige something like that. In a secondary school like this one and others, someone who has had sex is looked up to (laughter and agreement from a few in group)"

The fact that peer pressure and influence did not emerge in discussion does not discount it as an important determinant in sexual behaviour, given that specific questions about peers were not asked in focus group discussion. This one comment does suggest that young people have a lot to

gain by way of popularity and status when it comes to expressing their sexuality among their peers. However, the idea of embarrassment and secrecy largely overshadowed this concept of being open and boastful about sexual activity, as evidenced by the fact that peer influence did not emerge on its own without probing as did other important topics around sexual behaviour.

Secret keeping.

Given the taboo nature of sexuality in Ugandan society, especially among adolescents, it comes as no surprise that secret keeping was a recurring theme throughout the focus group discussions. Whether it was in relation to sexual acts, pregnancy, HIV infection, or accessing contraceptives, most adolescents felt strongly about keeping their sexuality a secret. Generally speaking, it seems that sexuality is largely a secretive topic in Uganda, especially in comparison to Western nations. Sexuality was not expressed as something to be exposed or embraced, but done in private, in a dignified manner at the appropriate time. Perhaps this can be attributed to the conservative nature of Ugandan culture, or how that culture has been influenced by Christianity and its morally conservative ideals. Obviously, there are deviations, however the cultural norm dictates that sexuality remain steeped in privacy. This is clearly understood by adolescents, as reflected in the following statement made by a young man during focus group discussion:

"2-22-R9) See according to African tradition sex is seen as something secret (other respondent agrees) …and in Christian religion, old people used to go very far in the bush and have sex and come back (some laughter)…it is supposed to be secret. You are supposed to have it secretly…"

This leaves adolescents to conduct their affairs and understand their sexuality in a very guarded way. They are not comfortable to acknowledge their sexuality openly. Rather they perceive the need to hide their actions, which they see as illicit and inappropriate. One of the areas where secrecy seemed most prevalent was in discussing the possibility of HIV infection. Secrecy was most likely less discussed in regard to pregnancy because it is difficult to keep a pregnancy secret due to the physical signs that emerge as the pregnancy progresses. However,

HIV infection is not as easily visible until it evolves into the various illnesses associated with Acquired Immunodeficiency Syndrome. A number of adolescents felt that if they were found to be HIV positive, they would not want anyone to find out.

"1-6-R2) Myself, I would go to a certain place where they don't know me, I just go to a clinic, tell a doctor and use another name and maybe they counsel me and they give me some drugs, but I tell them my problems, but I don't tell them my name if they are willing to help me I just keep it a secret—because maybe they tell each and every person about that."

Once again, the recurring issue of having private matters discussed publicly emerges as a concern among adolescents. Not being able to trust the people from who you are seeking help creates an unfriendly environment in which to address sexual issues. This is an issue that has been raised in past studies conducted in sub Saharan Africa (Brieger et al, 2001). Concerns of adolescents go beyond mistrust of patient/health worker confidentiality. Rather it encompasses relationships with parents, friends, and even significant others. Because they feel that they will become the subject of gossip and ridicule, they prefer to keep issues to themselves. Given that so many of the solutions to early pregnancy and HIV infection depend on the individual's initiative to seek out assistance, contraception, testing, or counselling, secrecy is a clear barrier to changing the sexual behaviours of adolescents.

Secret-keeping extended into creating schemes whereby young people could access the services they needed but maintain their anonymity. Students mentioned a variety of resourceful ways they could use to get around the issue of accessing contraceptives. This included lying to health workers or shop attendants in order to access condoms, sending others (including youngsters) in their place to buy condoms, befriending people who could get condoms for them, or going to clinics outside of their district where there was a better chance that no one would know them or their parents, (whether it be to seek out condoms, or get treatment for HIV infection). These schemes could partly be explained by embarrassment and shyness that adolescents feel when dealing with sexual matters, as discussed in the previous section. However, the greater issue is that when thought and calculation must be put into something as

simple as buying a condom, it is evident that adolescents are functioning within a restrictive environment, and perceive a great deal of opposition in comfortably expressing their sexuality or seeking out assistance for their sexual issues.

Practical considerations

Part of the process of making sexual decisions for secondary school students was giving thought to practical issues such as age, finances, and location. While finances have been listed in past literature, age consideration and the issue of location were not commonly cited in the literature reviewed for this study. Consideration of these factors consequently influences sexual behaviours, use and access to contraceptives, as well as use and access of health facilities.

One of the matters to which many adolescents gave consideration was that of age. Age and assumed maturity seemed to define the appropriate time in which to engage in particular sexual behaviours, such as intercourse. There seemed to be a general idea that sex and child bearing were meant for a certain age, at a time when the adolescents were settled, married, and had completed their education. Boys generally based this belief around the legal ramifications of early sexual intercourse, while girls made comments that largely reflected how others would perceive them if they were to experience an early pregnancy:

"2-43- R9) Me I understand that getting pregnant is bad at this early age, but when you are grown up ok. But at my age, getting pregnant, I don't feel like. Because it is so bad in this society to get pregnant. Everyone can be looking at you saying "this girl, she's pregnant." Even you can't feel comfortable in a place, you feel uneasy you don't feel like taking meals because when you take meals, you think the stomach will grow more fat and you don't want to attend anywhere, or associate with anyone"

Age seemed to provide the necessary consent for particular acts as illustrated by the following comment:

"1-24-R6) Being older and getting pregnant is good, but if I got an accident and became pregnant, I would just feel ashamed with my parents, students, at my age, and then I fear telling the boy all about the case"

A comment such as this may in part reflect that child bearing is a valued ideal, but should be reserved for a particular age and stage in life.

Additionally age played a role in the comfort level of accessing contraceptives. One young girl's response to how she felt about going to the store and buying condoms read as follows:

"1-30-R1 "...for example if it were now, I would feel uncomfortable, after married and finished my studies I would feel just as if I am buying sugar...right now I just close my eyes when I am buying it (laughter) *why do you feel uncomfortable?* Right now it is not legal."

Clearly, adolescents feel that certain behaviours are inappropriate because of their age, and they feel uncomfortable to behave in certain ways because of how they perceive society to view them. Age demarcates unwritten permission to engage in sexual acts with much more ease and openness.

Another consideration made by young people was that of finances. In a society where absolute poverty is a blatant reality, it is not surprising that young people would make comments related to financial standing. The issue of funds or lack thereof, permeated many topics around sexuality. For instance, finances were considered in choosing a form of contraceptive:

2-21-R8) Sometimes these protective materials are very expensive, so the income of someone will determine the method to use. So when I know myself I am poor, but at least I know pills are more expensive than condoms, so I would prefer using condoms...such that maybe I have 300 for a day to spare, I would use a condom...but when I get more income then we can switch on to pills. So the method that we use will depend on the income.

Finances also determined how young people perceived their access to medical interventions, as evidenced by this young woman's comments regarding bearing a child in the event that she was HIV positive:

"1-9-R9) In my case if I am HIV+ I will produce [have children] based on the situation I am living in.... If I have HIV and I am poor....you could be broke at any time, (an) HIV+ human his whole life is money—if you have no money, you cannot live so long, because there are many medicines that could push you up, living in a situation where you are very poor, and not prefer to produce, but if I have my money, I can go to hospital and produce."

The issue of finances also arose among young boys when they discussed getting involved in relationships with young girls. Previous studies in sub Saharan Africa state that boys perceive girls as having sex to gain materially (Schatz and Dzvimbo, 2001). Additionally, in Uganda, adolescents have identified a relationship as being sexual or not based on the exchange of money, stating that other gifts could be given, but as soon as money was exchanged, it was a sign of sexual interest (Nyanzi, 2000). Some boys in this study expressed the fact that a relationship with a girl was expensive, and in order to sustain it, they needed to buy many gifts, and even sell their belongings, including textbooks in order to afford gifts for their partner. The following exchange of comments illustrates what one group of adolescents had to say on the topic of maintaining relationships with girls:

> "2-18-R9) ...some girls demand money from boys that they may not be having...actually these are the reasons which have led me to not have any girl lover because it is not beneficial...because I would call them expensive ."
>
> Following discussion from multiple respondents:
>
> "You see here, people with the girl lovers, for example at our sister school at Kyebambe where most people have a girlfriend, when the time comes on Sunday, boys make lots of preparations...they go to the supermarket to buy apples and this and that to maintain relations They are expensive."
>
> *SC) They don't really buy things for you but you buy for them?*
>
> "Yes, those things ensure that you stay in the relationship (laughter)."

However, while students openly admitted that relationships were expensive, this seemed to be a more acceptable use of money among young people as opposed to the expense of bearing a child at an early age. One of the primary concerns expressed by young people when discussing early pregnancy was the fact that they would not be able to afford the baby, and thus would face financial hardship if they were to become or make someone pregnant:

> 1-35-R2 "Also, I wouldn't want it to happen (i.e.his partner to become pregnant) because of lack of financial support from my parents, even buying necessities for the girl"

Thus the issue of finance manifests itself in many ways from initiating and maintaining relationships, to accessing contraceptives to affording medical treatments. Clearly, adolescents have the ability to astutely understand the financial barriers that are imposed upon them, however, this was not a trend common to all adolescents. As reflected in previous sections, many students choose to ignore issues such as how they will afford expensive antiretroviral drugs or transport to clinics. Finance seems to be an individual consideration, perhaps expressed by adolescents who have given more thought to the realities of early pregnancy and HIV infection.

Finally, a couple of students did consider the practical aspect of location and its effect on sexual activity. This was expressed in very basic terms, in considering for instance where young people could go to engage in sexual activity:

"2-18-R9 …All this makes me conclude not having girl lover….But if I had one, I would not proceed in having sex, because of the reasons I told you, the problems we face. And at least I find, most people are unfortunate if they have a girl lover and they go into sexual relationship at least they pregnant someone…or they are caught (laughter) it is embarrassing…I have not found a convenient place (laughs) *Is that true?* Indeed it is true…you can't go to the bush…sex is meant for the bedroom."

For this male, lack of physical space prevented him from engaging in sexual intercourse. As he points out, he does not want to risk getting caught. This has implications for adolescent protection, since in many cases, adolescents will engage in intercourse in a hurried manner, and perhaps take advantage of whatever physical space is available to them, however temporary their privacy. To take the time to properly apply a condom is to risk getting caught, given the illicit and hurried manner in which sexual acts are undertaken (Macphail and Campbell, 2001). This potentially makes protection an irrelevant detail in the minds of adolescents. There does not seem to be any acceptable place, time, or environment for young people to engage in sexual activity. However, rather than eliminate adolescent sexual behaviour, this societal attitude could potentially create an environmental barrier where young people engage in unsafe sexual behaviours in hidden locations because of their fear of being found out.

Another aspect of location is that of rural and urban locations and the disparity in services available to both areas:

"1-36-R4)On my side, I think that sometimes condoms are very scarce in rural areas and many youth do not know more about it, so they go in for sex without condoms and that encourages the spread of HIV. *So you think it is better to use condoms?* It is better for living in urban areas, but most of the people in rural areas do not use them because there are not very many…"

Approximately 86% of Ugandans live in rural areas (Kaleeba et al, 2000). Many health services are focused in larger centres, thus allowing certain populations better access to health care and treatment. Rural villages with their lack of proper roads, sparsely distributed populations and insufficient health infrastructure tend to have less reliable access to not only health services but important supplies such as condoms and other contraceptives. It was discovered in interviews with health professionals, that although urban clinics and district leaders attempt to provide items such as free condoms to outlying communities, this services is at best sporadic and suffers from inadequate supply and funding. This problem is further compounded by the fact that sporadic access does not allow rural youth to become comfortable with contraceptives, through exposure and use. The disparity between urban and rural youth is a very real and formidable issue and is further discussed in following sections.

Female assertiveness.

One of the interesting behaviours witnessed among female participants was that many young girls felt comfortable asserting themselves in regard to contraceptive use, and discussing their concerns about pregnancy with their boyfriend. Assertiveness for the purposes of this study, is a demonstration of the ability to express thoughts, feelings, or opinions, even if it goes against the norm, and feeling confident in their ability to do so. Assertiveness exhibited among young women contradicts the typical submissive nature of women that is recorded in the literature, and points to the possibility of increased empowerment among young Ugandan women. The research of Nyanzi et al (2000) points to the issue that faces young Ugandans as they negotiate the tenuous

balance between "female chastity and submissiveness, and the modern image of sexual freedom"(p. 83). While this may be an illustration of that balance, it is difficult to assess whether or not this assertiveness is real, given that in focus group discussion, various scenarios were discussed hypothetically. It could be that young women, when surrounded by their peers feel empowered to be bold and make strong comments, however, when they are alone with the male, they feel shy and subservient.

Most of the comments that demonstrated assertiveness were in response to questions regarding comfort level in discussing protection, and adverse consequences of unprotected sex:

"2-44-R2) If you have a boyfriend, maybe if I had one, I would just be free to him without fearing him or being shy. Because the moment you fear him that is when you fall into problems. You share ideas and tell him what is wrong and what is right. I think I would not fear him and maybe I would advise any other, teenagers who are around, to put in their minds that thing of not fearing each other."

In this statement, the girl makes it clear that she is a proponent for speaking her mind and encourages others to do the same. However, she does not at the current time have a boyfriend and speaks hypothetically about what she believes she has the potential to do, rather than what may actually occur within the confines of the relationship. However, there were instance of females involved in relationships who stated they did not have a problem expressing their concerns to their partners:

"2-2-R2) For my case, I've got one(i.e. a boyfriend), and I don't feel shy when I'm talking to him about the dangers of getting pregnant so I advise him if we are to have sex, we use a condom."

A couple of students commented that they would use their own protection if the boy disagreed, however, they did not examine further issues such as cost, or their lack of knowledge on appropriate use of the female condom. As of yet, female condoms do not seem a realistic option for young Ugandan women, and so they must work within the existing, available protection, which is largely the male condom.

Many of the girls displayed a lack of concern when asked about the chance of a boy "dropping" them if she didn't comply with his demands. This is a positive step, demonstrating

that young women have a sense of self respect and self worth and that they are not reliant on their partners to the point where it can be detrimental to their own health and wellbeing:

"2-44-R7) For me I understand, most boys get advantage of shy girls, and playing sex. For me if I was the one and I had a boy lover or bf, I would call him aside and we discuss about HIV, unwanted pregnancy and after discussing about it in case he asks for sex at my age...I just advise him and tell him that it is still early and time is still there and we have to wait until we finish studies and that's when we can go into those things. *You wouldn't worry about telling him that, that he would go find another girl?* Let him go, there are many (laughs)"

While many young women felt strongly about remaining abstinent until they were ready for intercourse, it is questionable as to whether they would truly be able to do so. As Hulton et al point out (p. 45), "Abstinence requires certain skills of communication and negotiation…as long as the power and resources imbalance between young men and women continues and strong social pressure for having sex and bearing children while young remain, abstinence is unlikely to become a realistic option for young women…"

In making assertive statements, some adolescents pointed to the fact that many girls don't know how to assert themselves, and have never received appropriate guidance on how to react with boys, and how to express their opinions to boys. This is illustrated by the following comment made by one female in a single sex school, about her peers:

"2-45-R9) …They are very shy. Ok especially these ones, girls are used to staying alone and they don't know how to challenge those boys. But there are some people who have got parents who can tell them about that are the ones who can get safe and the ones who don't have parents who can tell them about that are the ones who have got that problem."

Young women have the ability to ensure protective measures are taken, given correct and useful education, positive role models, and the communication skills needed to negotiate with boys. Females can play a pivotal role in the challenge of protecting adolescents from early pregnancy and HIV. However, because their role in society is underappreciated and unacknowledged, this opportunity for change is overlooked. The education levels of the young women interviewed in this study suggest that schooling can have positive results. As stated in the literature, elevating

the social status of women allows them to stray from their traditional roles within society and engage in more effective preventative and protective behaviours (Bajos and Marquet, 2000). Some of the most assertive and astute comments regarding female expression came from women in all female schools. Outside of the textbook learning that they receive, young women learn how to question that status quo and to display their abilities in making positive decisions with positive outcomes for both themselves and their partner.

Results from Health Professional Interviews

The results obtained from interviews conducted with local health professionals were considered supplementary information to the primary focus group data. The main reason for speaking with health professionals was to add greater depth to the data obtained from secondary school students. Health professionals working in the areas of HIV and Family Planning Education were able to offer insight into how they viewed adolescent sexual issues, as well as their thoughts on the context in which adolescents live, and what barriers exist to achieving a higher level of protection among young people. While this study did not include any formal assessment of adolescent health services, professionals were questioned on their general impressions of the services available to young people. Because the data were considered supplementary, it was not formally analyzed through formation of categories and sub categories, as was the focus group data. Rather the interviews were read through multiple times, and the responses to each question were summarized to create an overall picture of what adolescent services currently exist, and what is believed to be lacking. Thus data have been analyzed for general thoughts rather than for incorporated themes.

As written in the section on data collection, nine interviews were conducted with professionals from organizations involved in either Family Planning or HIV Education. In order for the reader to get a picture of what services currently exist, a short description of each organization is given below:

Kabarole Research Center (KRC)

KRC is a Fort Portal based research centre that focuses on issues surrounding HIV/AIDS. They recently began a peer education program whereby they train group leaders who then train young people in the community. This is a collaborative education program that uses volunteers from the Basic Health Services team and other local health leaders. Each group has different approaches

including dance, drama, video programs and discussion. The program works in five districts of the Rwenzori region in both rural and urban centres.

Youth Concerned

Youth Concerned is a group of young people who use puppetry and drama to bring important prevention messages to young people. They go into rural communities and teach young people about condom use, HIV transmission and prevention, as well as how to protect against early pregnancy. The age group they work with is 13-27.

Toro Kingdom, African Youth Alliance Project

This is a government project funded by UNFPA. Their primary mandate is to deal with policy change and advocate for change in cultural practices that impact HIV and early pregnancy (this includes practices such as bride price, early marriage, etc.). Their target group is cultural leaders who have access to adolescents. Even though they do not work directly with adolescents, they are aware of adolescent sexual behaviours in the area. They operate in three districts and other sub districts of the region.

Family Planning Association of Uganda

This is a local non-governmental organization that provides family planning services. They provide a wide range of services to youth in the area, including adolescent reproductive health education, life planning skills education, education on prevention of STI's, pregnancy tests, antenatal care, post natal care, post abortion care as well as HIV counselling. The life planning skills program (which is basically a peer education program) has been piloted in 4 sub counties and was to expand in November 2003. The clinic in Fort Portal also has a youth room where young people can go and discuss issues. They also sponsor a drama and puppetry group that goes out into local areas.

Lyamowa Youth Drama Group

This is one of the peer education groups that is trained and works closely with the Kabarole Research Center. These young people visit primary and secondary schools and communities and work with both in school and out of school youth, discussing issues of reproductive health. The group is made up of students, as well as young community members such as teachers. They also discuss other related topics such as drug abuse. Their method is to work with the youth and find out what the most pronounced problem is in the area and then work on that topic with the youth. When supplies are readily available, they also distribute condoms and other contraceptives such as birth control pills.

Parents Concerned

Parents Concerned is a local group that is also funded largely by the African Youth Alliance. They focus on increasing the parental role in adolescent's lives, through training and education. They also conduct research through surveys, and hold workshops to educate and learn more from parents. Parents Concerned has adopted an approach whereby they talk to in and out of school youth to gauge what type of issues exist in the parent youth relationship, as well as train them on life planning skills and communication skills. They then use that information to help educate parents, in the hopes that increased dialogue between the parents will lead to increased dialogue with the youth. For this study, our contact person was in charge of the CASS (Caring Shengazi Shwento) Project which is a project that is looking at re-introducing the paternal aunt and uncle back into the adolescent's life. While he was in charge of this specific project, he was able to give a broad overview of youth issues encountered.

Clinical Officers Youth Alliance

This is another group that has affiliation with the Kabarole Research Center. It is a group made up of young medical students who felt the need for a youth to youth initiative. They work in

primary and secondary schools and among out of school youth in local communities to educate students on reproductive health issues. They also work with parents to increase parent child communication and to equip them with the ability to discuss sensitive issues with their children. The group is made up of 20 medical students. They work with students from age 10-24.

Buhinga Hospital Clinic

This is a day clinic connected to a local Fort Portal hospital. It is a very busy clinic that sees individuals of all ages. For adolescents, they provide reproductive health education, including education on body development and maturation. They also educate on HIV prevention and encourage testing. They try to go out into the villages to reach adolescents, and used to have a day specifically for youth, as well as a special clinic for youth, however these programs have not been very effective as of late due to lack of funding and staff shortages.

Muchwa Clinic

This is a Clinic located near the Basic Health Services Offices. They see clients of all ages, and assist adolescents with any issues or concerns they may have including reproductive health issues. The representative we spoke to was a trained mental health nurse, but saw clients with all types of problems. There are no youth specific services at this clinic, however youth are welcome to use the services provided.

Interview Results and Discussion

Health professionals were queried on a number of topics related to adolescents, including what they feel are the greatest challenges in getting prevention messages across to young people, information sources available, young people's ability to access contraceptives, and general impressions of local health services (See Appendix 2b). Most of the health professionals felt that the challenges which existed in preventing HIV infection were the same as those challenges

which existed for preventing pregnancy. These included addressing the information gap, and deconstructing existing misconceptions. Many of the misconceptions mentioned in interviews matched those that had been heard in focus group discussion. This included condoms not fitting, condoms causing cancer, condoms getting "stuck in the woman's vagina, and birth control pills deforming babies. In cases where adolescents were using condoms, another problem was consistency of condom use, especially in long term relationships, where after trust had been established, condoms were felt to be unnecessary. Health professionals also pointed to the lack of adolescents' ability, especially young women, to assert themselves in sexual situations and appropriately negotiate contraceptive use. Adolescents are seen as wanting to experiment and try new things, often engaging in sex in an accidental manner, without fully understanding the potential consequences.

One of the other key problems cited by many health professionals was the fact that adolescents did not feel comfortable approaching service providers, due to age disparities and discomfort related to how adolescents felt they were perceived. This serves to add to the information gap because young people feel that they do not have anywhere to turn for accurate information:

"..the young people don't have enough people that they regard as people of authority in those areas, to give them information that they really trust. They have a number of professionals, a number of social workers, whom they can trust…"

"…the sources of information are still inadequate among the youth…"

Lack of privacy and confidentiality were mentioned by a number of health professionals as a barrier which prevented adolescent use of health services:

"The reason they may not go to the community is because in the village information spreads like bushfire…by the time I buy the condom or go to the health unit-the person in the health unit is well known to everyone-and if I go there to get a condom, I will be tagged as a wrong person in the community because our society is not yet fully open to discussing sex freely…"

"...most service providers are not youth friendly. For example, somebody comes here, a young girl of 14, imagine a service provider says "even at your age, even at your age, you have started doing this?" Just imagine. Immediately that one will never come back and even tell others "you don't go there" These adolescents you have to appreciate that it is hard to come and even what they want to discuss is confidential. Some of these service providers will go and share some of these things with people outside and these adolescents come to know about it. Something small like that can spread very, very fast, and the other people will never come back. And that is why when talking to some of them, they prefer to go long distance than to go for service from where they know them."

One health professional, who had interviewed a number of parents, stated that in many situations, parents are very aware of the fact that their children might be engaged in sexual behaviours, but feel awkward and uncomfortable to bring it up with them:

"...the parents problem is an attitude problem....We ask them at what age would you like to start discussing sexuality matters and sensitive matters with young people, they will tell you, "ahhh, I think about 18, 17, 19" But then later on if you ask them at what age do people initiate sexual interaction and have first sexual contact, they say "Ahh, even 9, 12, 13". The parents will say that, they are aware! So what is the problem? Why do they want to talk later when the young people are involved earlier? Why do you think that is? It's an attitude problem. They think "you don't talk to these young people when they are still young" *SC) Because they don't want to give them the idea?* Yeah, that kind of thing so it is really an attitude problem they think they just hold on until they are old enough."

There is a lack of parent child communication around sexual topics. Parents were also faced with the issue of their children knowing more than them in regard to sexual topics, which made discussions even more difficult.

As well, the issue of private behaviours (such as buying condoms or seeking sexual health advice), becoming public was cited as a problem that hindered young people's ability to access not only health services, but contraceptives as well. Rather than go into a public venue and ask for a package of condoms, the young people would go in and ask for other products which the attendant would implicitly know to be condoms:

"It's more harder for some of these, when they go in the community they have certain names they use. They will not say they want a condom, they will go and say, "can you give me some Fansider (malaria tablet)..." and that person knows Fansider is a condom. They don't say condoms. Because generally to the older people, you know maybe cultural wise and whatever, condoms are still associated with promiscuity. So when this one goes to buy a condom from a drug shop this one will attach certain meanings to it..."

Health professionals pointed out that using code names for condoms such as "airtime (phone cards for mobile phones)", or "Fansidar (malaria tablets)" was known to be a common practice among adolescents. Among professionals who worked in clinic environments, adolescents were known to not want to stay and wait for assistance in fear that they would see someone they knew in the clinic. Thus if they were not served immediately, they would not wait. This extended into the act of carrying condoms, because if adolescents were to be seen with condoms in their pocket or in their possession, they risked parental discipline, disapproval of society, and taunting of peers. Thus stigma surrounding condom use and sexual activity as well as cultural ideas about adolescent sexuality acted as a challenge in young people protecting themselves. Stigma was also mentioned to exist around finding out HIV status. Adolescents feared finding out their status, because of how they would be viewed by others. This was mentioned on more than one occasion in relation to pregnant girls who did not want to be tested for HIV infection because they feared the outcome. Health professionals also mentioned the issue of people feeling "jealous" upon testing positive and wanting to spread the virus to others, an issue that was heard first hand in focus group data. Creating outlets for assistance with which adolescents feel comfortable continues to be a struggle in Uganda. Many health professionals pointed to the importance of youth friendly services, and utilizing youth in peer education programs. Messages directed at youth were well received when delivered by a peer rather than by an adult.

Other issues that arose when discussing adolescent health were the influence of television, internet, and "blue movies" (pornography). Young people, wanted to imitate what they saw in the media. Additionally, the issue of money in exchange for sex was noted as a problem, whereby young women were enticed by money without giving adequate consideration to their safety. One professional noted that the issue of religion, and Catholic opposition to the condom, served as a challenge to protecting adolescents, because they were more likely to adhere to Christian beliefs than prevention messages:

"Then we also have the problem with the religious sector, like the Catholics are against the condom. So these ones are devoted Christians, they contradict themselves. They say we are now devoted Christians, we are going to listen to what the Pope is saying, no condoms for us, then they come and practice sex (laughter) *So then they are having sex but not using a condom?* Not using a condom because their religion says to not use."

It is interesting to note that one of the challenges brought up in past literature has been the idea that engaging young people in discussion about sexual matters can entice them to become sexually active. In fact, a couple of the interviewees expressed the same opinion, believing that introducing ideas on sexuality to young people led them to have sex prematurely, or condom advertisements were promoting sex before they were ready. Clearly, if health professionals themselves hold this attitude, it is an issue that is far reaching and needs to be addressed. Despite this fact, in many cases, the health professionals felt that young people, especially those in school, had a high level of knowledge. However, even though adolescents were relating the risks of pregnancy and HIV, they did not believe this knowledge was being used in behaviour change.

When asked about how adolescents perceived their risk of HIV infection and pregnancy, most health professionals felt that adolescents feared pregnancy much more than HIV infection. This was largely due to the fact that pregnancy was evident, while HIV infection was not. For adolescents, pregnancy was an imminent issue, while HIV infection, due to it's course, did not have to be acknowledged immediately:

"In the youth, they are more worried about pregnancy than HIV. Because the reason is that with pregnancy the parents will get to know that you are pregnant within the next three months, where HIV can take some time, so they are more relaxed on HIV and more worried about pregnancy…"

The immediate consequences of pregnancy included expulsion from school, disownment from the family, economic hardship, and social implications. While focus group participants did not explicitly fear pregnancy more than HIV infection, comments regarding their fear and worry of pregnancy suggest that pregnancy presented a greater problem to them than the idea of HIV infection, for which they mostly remained positive. The fact that pregnancy is more of a concern

despite the fact that HIV can bring death, suggests that young people feel a great deal of pressure to fit into their social environment.

Many health professionals did not trust that adolescents who asserted themselves in focus groups or expressed positive attitudes in the face of potential HIV infection were being realistic. They categorized positive responses or assertive attitudes as "just talk." This was partly due to their own experience with adolescents, as they felt that in certain cases, adolescents would give responses that they feel are best, rather than those that are truthful. It was also due in part to their understanding of the consequences that face young people when become pregnant or infected with HIV. However, program directors who had worked specifically with young women acknowledged that after being trained and educated, they were more confident in themselves, able to assert themselves and motivated to gain greater knowledge.

Because many of the health professionals in this study work with both in school and out of school youth, they were able to provide a broad overview of how the youth in our study compared to youth who did not have access to education. There also seems to be a considerable difference between the youth in urban areas versus the youth in rural areas. This is largely due to the fact that many services are concentrated in urban areas, thus allowing urban youth more access. School youth and urban youth had access to resources such as Straight Talk Magazine and sex education programs. They were also able to access clinics, while rural youth had to consider the issue of transport. In addition, rural youth and out of school youth were said to face greater hardships such as extreme poverty which led to greater vulnerability to sugar daddies, or illiteracy which negated their ability to read important information. Another issue for out of school youth was mobilization. Health professionals noted that it was difficult to bring them together as their days were dedicated to their subsistence. If they were to dedicate a couple of hours to learning about prevention of pregnancy or HIV, they were giving up tasks such as fetching firewood or water, or driving their boda boda (motorbike for hire) and making their day's earnings. Thus it is difficult to get these young people to give up their time and congregate

as a group. Lack of education combined with a lack of access to services creates a huge disparity in sexual knowledge and ability to achieve protection among the adolescent population. This is an issue that will be further explored in the study conclusion and recommendations.

Opinions differed as to whether health services in the Fort Portal area were strong or whether they needed further improvement. Many of the interviewees pointed to a lack of funding, staff, and supplies, which hindered their ability to offer quality services. The workload for clinic staff was often too much for one person, which limited the time available to speak with adolescents. One health professional pointed to the fact that in many cases there is a lack of adequate training for health workers, and they do not know how to appropriately deal with clients. He believed that the culture of care in Uganda is lacking, in that health workers do not acknowledge that how they talk to and treat their clientele will largely determine future usage. Many suggestions were made towards incorporation of peer education, as well as involving teachers in the education of students, an idea that will be further discussed in the conclusions section.

In respect to adolescents, many also felt that clinics and other venues for youth support were not working to their fullest potential to access youth. Expecting youth to talk to older nurses, not being open at certain times of the day or week, not being able to provide adequate privacy to adolescents (such as a separate entrance or private room) and failing to address the fact that youth have specific needs apart from adults, all were mentioned as barriers to adolescents utilizing current health services.

Generally speaking, health professionals felt that there was a divide between family planning and HIV educators in the region. While they acknowledged that their end goal was the same, they felt that each group was carrying out its own mandate without considering the major overlaps that existed. Most felt that collaboration between the two would be beneficial in sending a clearer message to adolescents, while addressing both issues of HIV infection and pregnancy simultaneously.

CHAPTER 5

Study Conclusion and Recommendations

While this study was largely exploratory in scope, it has produced a number of findings which speak to the importance of paying close attention to adolescent experiences and understanding the challenges they face in achieving safe sexual behaviour. Young people are in a time of transition in their lives and vulnerable to a number of changes. Health initiatives must recognize that what they learn at this point in their lives has the potential to carry on into adulthood. Adolescents represent a unique age group of individuals, balanced precariously between childhood and adulthood. Appreciating their uniqueness, capabilities, and experiences within the context of Ugandan culture and environment, will be the first step in promoting healthy behaviours and attitudes. The following study conclusion serves to highlight some of the key points discovered in the study, as well as an opportunity to revisit the original study purpose and research questions and address how the findings fit into the suggested determinants of health framework.

One of the first and foremost points to consider is the fact that the young people interviewed in this study have an understanding that HIV infection and pregnancy are related and that protection against one does not mean you are protected for both. The groups interviewed, were seen to be articulate, assertive, and intelligent about the potential consequences of unprepared sexual behaviours. Participants seemed to demonstrate a considerable amount of knowledge in discussing issues central to risk and understood that early sexual activity and unprotected sexual intercourse could have very adverse effects. Study results also suggested that students had a considerable knowledge of contraceptives, including which types are available to them, proper storage, and expiry dates (for condoms). Much of the discussion content demonstrates that young people are being targetted for important health messages, and that they have a basic understanding of how to protect themselves. Safety messages seem to have become a more accepted part of the sexual dialogue, and in fact in many cases, when discussing condoms,

relationships and sexuality in general, one got the impression that these students have discussed many of these topics at length in various ways. Thus, Uganda must be applauded on its concentrated effort in recognizing young people as a key demographic and targeting them in the promotion of less risky behaviour.

That being said, there are still a number of fundamental areas of adolescent reproductive health that must be addressed. While adolescents have gained a considerable amount of knowledge in the area of unprotected sexual behaviour and protection, there are still some critical gaps and misconceptions that hinder their ability to protect themselves. Most adolescent participants held many incorrect ideas around contraceptives as well as a number of gaps in knowledge related to HIV transmission and reproductive physiology. While secondary school students are privy to informational outlets which are not available to out of school youth (i.e. sexual education programs, Straight Talk Magazine and Radio), there is still need for reproductive health awareness. Basic knowledge needs to be built upon so that students understand the more complex implications of early sexual behaviour. For instance, in many cases students understood that protecting for HIV infection does not necessarily equate to protecting for pregnancy, however, dual protection as a concept and practice was largely foreign. Similarly, many students did not have all the necessary facts around mother to child transmission. Despite the launch of the Prevention of Mother to Child Transmission Program in the Fort Portal Municipality and surrounding areas during the time of data collection, many students could not recite all the modes of transmission from mother to child, nor did they seem to fully appreciate the risk that was still present despite antiretroviral therapy.

Perhaps one of the most prominent concepts that emerged during the study is the fact that adolescents are apprehensive and hesitant to openly express their sexuality. Social barriers that exist, whether in the form of disapproving parents, condescending adults, or under experienced peers, serve to further perpetuate adolescent sexual risks. As conveyed in the original Determinants of Health framework and Mandala of Health, this is a clear example of how larger

factors such as culture and community, can influence health behaviours and outcomes. An important example of this is the fact that for the most part, young people fear pregnancy more than the risk of HIV infection, despite the fact that HIV infection will lead to death. This speaks to the pressures young people face within their social environment. The fact that early pregnancy has immediate social consequences for their schooling, social relationships, and general status in society makes it a more of a threat than HIV infection, which can be more effectively hidden from society's judgement for a longer time.

Because young people are hesitant to seek out assistance, or access contraceptives, they are putting themselves in unnecessary danger. Clearly, in order to address adolescent sexual needs in Uganda, policies must begin to affect the larger social environment. Working towards breaking down existing barriers and moving past cultural norms that may be restrictive, will serve to increase adolescent's comfort level, and further allow them to leave behind feelings of embarrassment and anxiety and move towards assertiveness. It is important to note that even simple solutions such as public condom dispensers are a viable option to protect anonymity and increase adolescent comfort in accessing contraceptives. This idea is even more possible with the recent introduction of coinage into the Ugandan currency (Kipp, personal communication).

Achieving a context whereby adolescents feel comfortable coming forward requires cooperation among all facets of society. This includes teachers, parents, health workers, cultural leaders, and religious leaders. Deconstructing current ideas of adolescent behaviour and allowing adolescents a voice to express their sexuality and sexual issues will go a long way towards creating opportunities for young people to practice preventive behaviours. Knowledge directed at adolescents and the community as a whole must encompass not only the basic facts of pregnancy and HIV infection but move towards a practical and applicable comprehension of the issues that surround sexual behaviour. This includes everything from the communication skills needed to negotiate contraceptive use, assert oneself in relationships, and access contraceptives in public

venues, to broader issues of cost and transport that hinder young people from seeking assistance and protection.

The study points to an under used role of Ugandan parents and adults in general, as they are felt to not understand adolescent lifestyles. Students feel that parents and elders dictate rather than discuss which leaves adolescents feeling confused and uninformed. It is important to begin to include adults in the discourse on adolescent sexual health, and investigate how they view adolescents and how they can be better equipped to inform teenagers on sexual topics. While this initiative has started with local agencies and NGO's, it must become a key focus. Just as sexual information is targeted to adolescents, adult-specific formats must be developed so that parents, other adult role models (including potential sengas), and health workers can gain knowledge in areas of sexual health, so that they are not faced with uncertainty when broaching sexual topics with their children. Increased discussion and training of adults will lead to increased comfort levels while still respecting cultural roles and boundaries.

Along with an increased role for adult guidance, adolescents and health professionals alike point to the need for greater attention to investigating the potential of peer education programs in Uganda. Adolescents in this study continuously expressed their discomfort in discussing sensitive issues with adult health workers. Additionally, adolescent focused information sources, such as Straight Talk, are quite popular among school aged students. Health professionals in the region have already recognized the effectiveness of the youth to youth format and the benefits to be derived from providing adolescent friendly services. Whether it is through drama, focus group discussion, or one to one counselling, adolescents seem to be very receptive to the concept of learning from younger people that they can relate to, and who face similar issues. Training by young people for young people, in important life skills, communication skills, mechanics of contraceptive use, and other key areas, will serve to empower young people to engage in safe, planned sexual behaviour. Establishing young people as educators and leaders in

the community also serves to elevate the status of the general adolescent population, giving adults an example of what adolescents are capable of accomplishing when given appropriate resources.

Apart from developing programs such as peer education and youth groups, there is need to provide additional support to existing services. Funding is a pervasive issue for all services. Shortage of supplies, resources, and staff has direct implications on the way that services in the community of Fort Portal are offered. The need for continued financial aid is both obvious and necessary. Increased funding will allow for the employment of adolescent specific health workers, staffing on adolescent specific clinic days, and more consistency and continuity in health outreach programs. However, even aside from funding of existing health services, there is the need to re-evaluate how health services are currently offered. Concerns from adolescents and health professionals demonstrate that at the present time, services in Fort Portal and surrounding areas are not doing all that they can to serve adolescent sexual needs in the best manner possible. Knowing the pervasive embarrassment and anxiety that accompany many adolescents foray into sexual activity, health services must take further precaution to respect young people's privacy and confidentiality. This may be as simple as providing a separate resource room for adolescents, whereby they can come sit and read on their own, play games, or speak to counsellors, without the worry of having other clients see them. Clinics and adolescent health agencies must create environments where it is acceptable for adolescents to be seen. Holding group discussion at local clinics will allow young people to come to clinics with their friends and peers and begin to feel comfortable in the health service environment. Health services for both HIV prevention and family planning will benefit from further collaboration and shared resources targeted towards adolescents. These agencies can play a critical role in creating a more open sexual environment and tackling some of the current social barriers which prevent adolescents from comfortably accessing assistance. Ultimately, it is imperative for adolescents to feel that they can trust those people from whom they are seeking advice and guidance, and that the guidance they receive is both qualified and well-informed.

While this study has allowed an enhanced understanding of some of the issues that face adolescents and their sexual practices, it is important to remember that they are but a fraction of the entire adolescent population in Uganda. While these students have access to education, resources, and information outlets, many adolescents in Uganda do not. Many young Ugandans spend their days engaged in subsistence activities, with little or no access to information, contraceptives, or health services. While secondary school programs go a long way towards achieving adolescent protection, there are a number of young people who cannot access education and practice risky behaviours on an everyday basis. Similarly, while urban youth are able to access clinics and services relatively easily, the rural majority face transport issues, and lack of services all together. Thus rural and out of school youth form a population that cannot be overlooked. While young people in schools do form a captive and easily accessible audience, further studies are needed that specifically investigate and address the unique challenges that the remainder of the adolescent population face.

Time, patience, and a continued and concerted effort directed towards adolescent health will serve to bring about the necessary changes to Uganda's young population. Secondary school adolescents are a pivotal population, and have already showed interest and assertiveness that can bring needed changes to the HIV trends in Uganda. Efforts must be focused on increasing adolescent capability through dissemination of important sexual information, consistency among information sources available to young people, increased role of adult leaders in the community, and a general respect and acceptance of adolescent sexuality in the larger cultural environment. By fostering the health and knowledge of its young people, Uganda stands to make immeasurable gains in every sector, be it health, economy, business or education. With support and guidance that speaks to the needs of young people, they will be empowered to reach their true potential and serve as healthy, contributing members of society for many years to come.

To truly build effective prevention strategies, policy makers and public health professionals must first have a solid foundation and understanding of how adolescents perceive HIV and

pregnancy. By examining the similarities, differences and relationship between perceptions and practices related to HIV and pregnancy, it is anticipated that improved approaches to both may result. Cross cultural collaborative research will allow for policy recommendations both within country (concerning health and education programs) and abroad (concerning funding and human resource support). By taking into account the context in which adolescent beliefs surrounding HIV transmission, pregnancy, and contraceptive use are formed, as well as how these topics relate to one another, studies such as this will serve to outline a clearer vision of how programs can explicitly target adolescents. In small, but still relevant capacity, this research can strengthen the importance of a global perspective among both Canada and Uganda in regards to issues of health and wellness. It is only through international response and cooperative effort that we will find solutions for truly global issues such as that of the HIV/AIDS epidemic and family planning.

Dissemination of Data

As Ulin et al (2002) point out, research dissemination is a process rather than an event, that is conducted throughout the study rather than at the solely at the study's completion. Dissemination of research results serves to provide tools for researchers and health advocates to advocate for policy change. It also assists other researchers, decision makers and the general public to further understand the various factors (social, political, economic) that influence reproductive health (Ulin et al, 2002). Ultimately, it is hoped that efficient and thorough dissemination of research findings will result in further studies as well as proposed initiatives towards enhanced program development in the region. The goal of this study is to serve as a document which informs researchers and health professionals alike on future directions that will better serve adolescents in regard to reproductive health issues.

In keeping with these ideas, meetings with health professionals throughout the study served as a means of dissemination, as they informed key stakeholders on some of the issues that currently exist. Similarly, a seminar was held in Kabarole to discuss initial results with the Basic

Health Services team. Copies of the completed thesis, resulting publications, and a final report will be shared with Basic Health Services and Makerere University. Results were also shared with academic audiences and the general public upon re-arrival in Canada through participation in University of Alberta International Week, oral and poster presentations, media interviews and articles, and research seminars, in an attempt to raise awareness and promote further collaboration (see appendices for complete list of events and articles).

Significance of the Study

Understanding adolescent perceptions of these HIV infection and pregnancy serves as a primary step in addressing their ability to protect themselves. Closer examination of the issues of HIV infection and pregnancy, and how these topics are viewed by adolescence is a crucial step in addressing reproductive health issues. It is important to understand these issues within the broader context in which they are played out, and to delve into some of the factors which influence adolescent's concept of risk, and ultimately their preventative behaviours. By working closely in collaboration with the research team at Makerere University and the basic health services staff in the Kabarole district, the research will be relevant to the population in which it is carried out.

It is hoped that applying these research results to future education and family planning programs will allow for improved programming in both areas. It has the potential to produce solutions that are based on an awareness of the social context, and which can be applied in the everyday lives of adolescents.

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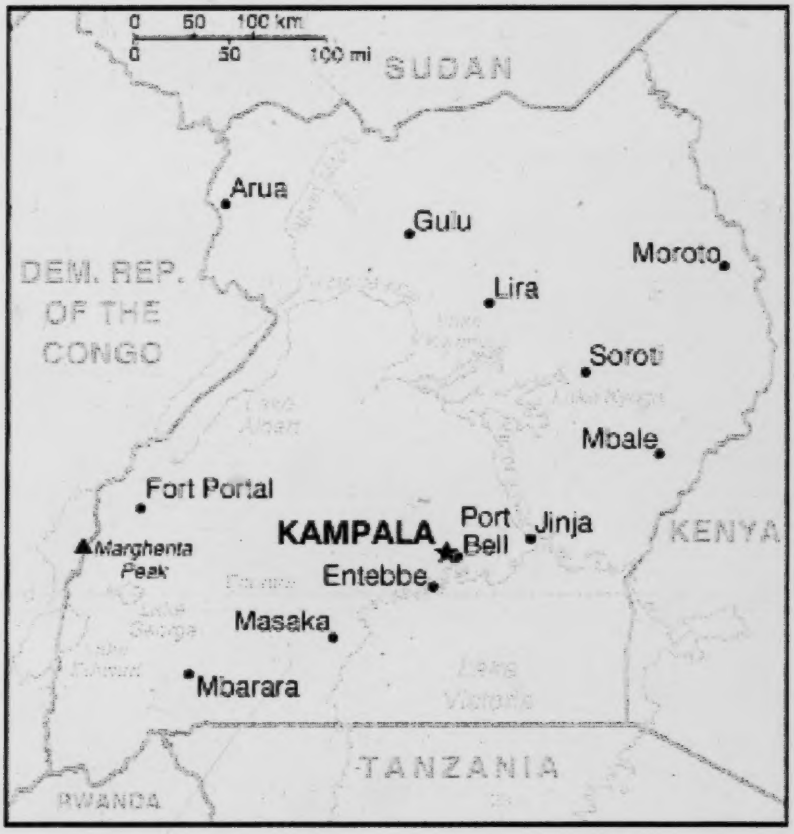
Appendix 1—Map of Uganda



Appendix 2

Focus Group Interview Guide*

Welcome the participants and thank them for coming.

After everyone is seated, begin introductions.

Introductions:

- Introduce yourself as moderator and share some facts about yourself as well as some background experiences. Introduce the observer (co-moderator) stating a few facts about their background
- Allow participants to introduce themselves, giving their name, age, and one fact about themselves (i.e.-their favorite hobby)

Explain the role of the research team

- Moderator-helps direct discussion to ensure all objectives of focus group discussion are met
- Co-moderator-operates tape recorder, assists with discussion, takes notes during discussion

State the study objectives of the project. Through our study, we aim to:

- Look at how secondary school students view pregnancy and HIV infection. Are there similarities and differences in their perceptions?
- Do adolescents see a relationship between HIV and pregnancy?

The focus group discussion will last 2 hours.

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* Adapted from Roberts M, "A Description of the Socio-cultural context of Sexual Health in Ulaanbaatar, Mongolia for a School-based Peer Education Program" (thesis), 2001, University of Alberta

Explain that the discussion will be audio taped so that researchers can remember what was said. Remind students that everything said in the discussion is confidential, and that all final tapes and transcripts will be kept locked in a cabinet at the University of Alberta for five years.

Explain the ground rules for focus group discussion. Ground rules are used to make everyone feel comfortable in the discussion, to ensure that comments are kept confidential, and that everyone participating in the discussion respects each other. Ground rules assist the discussion in going smoothly. Ground rules will be written on the chalk board, and can be added to at any time.

1) Right to pass (not answer a question)
2) Respect others' opinions
3) Right to be heard (only one speaker at a time)
4) Agree to disagree in the discussion
5) Respect confidentiality of personal information (do not discuss it outside of the room)
6) There is no such thing as a stupid question.

Turn on the tape recorder.

Do not use participant names when asking questions. Follow the discussion guide, ensuring that focus group objectives are met, but probe enough to allow for exploration of important topics that may arise.

At the end of two hours, review main points of the discussion to clarify what was discussed. Turn off the tape recorder.

Thank the participants for coming

If time remains after question guide has been completed, then allow some time for informal questions

After the students are dismissed the research team will:

-Reflect on how the focus group went

-Acknowledge what went well during the discussion to repeat for next time

-Acknowledge what can be improved on, and make note of it to change for next time

-Co-moderators will make separate notes, and meet at a later date to compare notes and review data

Appendix 2a

Adolescent Focus Group Discussion Guide

Views on pregnancy and its prevention

1) How do you feel about the possibility of getting pregnant?

2) Do you and your girlfriend/boyfriend talk about the possibility of getting pregnant?

3) Does contraceptive use depend on the type of relationship you're in?

Views on HIV and its prevention

4) What impact do you think HIV would have on your life?

5) Do you think someone your age infected with HIV would be reluctant to talk about it? Why or why not? Who would you talk about it with?

6) Do you think condoms are an effective method to prevent HIV?

7) Whose responsibility is protection? Why?

Do adolescents relate the risk of HIV infection to the risk of pregnancy as well as ways to prevent them?

8) Does being HIV positive affect your future pregnancy? How?

9) Do oral contraceptives protect you from HIV?

10) How could you protect yourself against HIV and pregnancy at the same time? Have you heard of dual protection?

Appendix 2b

Health Professional Semi-Structured Interview Guide

1. What do you see as the challenges to preventing HIV infection in adolescents?
2. What do you see as the challenges in preventing pregnancy in adolescents?
3. How do adolescents perceive their risk of HIV infection? Of pregnancy?
4. Do you think that adolescents have sufficient access to information and resources (contraceptives, condoms) to prevent pregnancy and HIV?
5. What are some misconceptions among youth regarding contraception that you face when attempting to educate them?
6. Where can adolescents go in the community to find information and access contraceptives? Condoms?
7. How do you think adolescents view HIV and pregnancy in relation to one another?
8. Do you feel that HIV status affects contraceptive use?
9. How do you view local services for HIV/Family Planning?
10. What advantages/disadvantages would you see with greater collaboration between the two services?

Appendix 3- Information Letter for Focus Group Participants

Sunita Chacko, Principle Investigator
Master's of Science Candidate
Department of Public Health Sciences
University of Alberta, Edmonton, AB
Phone 780-439-6144

Dr. Lory Laing, Supervisor
Professor, Department of Public Health Sciences
University of Alberta, Edmonton
Phone 780-492-6211

1 Re: Investigating Adolescent Perceptions of HIV Infection and Pregnancy, Fort Portal, Uganda

Study Purpose: We are doing a study to better understand how students your age view HIV infection and teenage pregnancy. We also want to know how you feel about protecting yourself from either or both. By asking these questions, we hope to gain insight into teenagers' opinions of these topics. The information we collect can help to improve local education and prevention programs in your community

What is Involved: If you agree to participate in the study, you will be invited to a discussion group with 6-8 other students your age. The discussion will be led by two moderators. Some topics they will discuss with the group will be views on HIV infection, views on teenage pregnancy, and how students view local HIV prevention and family planning services. The discussions will be held away from the school after school hours. The group will contain only males or females and will not be mixed. The discussion will be conducted in English and will not take more than two hours.

Risks and Benefits: Participants may experience some embarrassment or negative reaction from the group when discussing topics of such a private nature. There are no other known risks from participating in the study. By taking part in the study, you can help to improve future education and prevention programs in the region.

Confidentiality: The discussion will be held in a room where no one can hear what is being said. Researchers will do their best to make sure that no one in the group discusses what they have heard when they leave the group. Before the group discussion begins, the researcher will remind the group that what is said needs to remain confidential. If there is something you would not like to be known or discussed, please do not feel any pressure to share it with the group. Your name will not appear anywhere in the study. The researchers are the only ones who will see the data collected. All data collected will be stored in a locked cabinet for at least five years. Consent forms will also be stored in a locked cabinet for at least five years. All information will be confidential except when professional codes of ethics or legislation require that we report them. The study results may be published or presented to others. If this happens, your name will not be used. If we need to go back to the data and use it again for some purpose, we will have any further studies approved by an ethics committee.

Freedom to Withdraw: You do not have to be in this study if you do not want to be. If you decide to participate and want to withdraw from the study, you can do that at any time. You do not have to answer any questions that you do not want to. Your education will not be affected if you decide not to take part in this study.

Questions or concerns: If you have any questions about this study, you can call the Principle Investigator at _____or Mr. Tom Rubaale at the Health Department in Fort Portal at 483-22575

Initial of Researcher_____ Initial of Subject_____

Appendix 3a- Information Letter for Health Professionals

Sunita Chacko, Principle Investigator
Master's of Science Candidate
Department of Public Health Sciences
University of Alberta, Edmonton, AB
Phone 780-439-6144

Dr. Lory Laing, Supervisor
Professor, Department of Public Health Sciences
University of Alberta, Edmonton
Phone 780-492-6211

2 Re: Investigating Adolescent Perceptions of HIV Infection and Pregnancy, Fort Portal, Uganda

Study Purpose: We are doing a study to investigate how adolescents between the age of 14 and 18 perceive their risk of HIV infection and pregnancy. This involves looking at how their perceptions are influenced by social norms and values, knowledge and attitudes and how these perceptions translate into prevention measures. We want to look at whether adolescent perceptions of HIV infection and pregnancy are similar or different. In addition, we will see if these perceptions are related as well as how adolescents feel about prevention services in the area. We feel it is important to ask the perspective of local health professionals, such as yourself, since you have an understanding of adolescent sexual behaviours through the work that you do. The information we collect may eventually help to strengthen HIV prevention services and family planning services in the region.

What is Involved: If you agree to participate in the study, you will be interviewed by the principle investigator. You will be asked questions about adolescents and your opinion of how they view risk of pregnancy and HIV infection. You will also be asked about misconceptions which you believe adolescents to hold on these topics. Finally, you will be asked about the informational resources available to adolescents and give your opinion of local services for HIV prevention and family planning. The interviews will take place in a closed office and the only people present will be you and the interviewer. The discussion will be conducted in English and audio taped. The interview will not take more than one hour.

Risks and Benefits: A perceived risk may be that any negative comments you discuss will go back to your supervisor. However, all measures will taken to ensure confidentiality and that all data is heard and viewed only by the research team. By participating in the study, you can improve future education and prevention programs aimed at adolescents in the region.

Confidentiality: Your name will not appear in the study. The researchers will be the only ones who see the transcripts of the interview and hear the audio tapes. These transcripts and tapes, as well as the consent forms, will be stored in separate locked cabinets for at least five years. All information will be held confidential except when professional codes of ethics and legislation require reporting. The final study results may be published or presented to others. If this happens, your name will not be used. Any further analysis of the data beyond this study will undergo another ethics review before proceeding.

Freedom to withdraw: You do not have to participate in this study if you do not want to. If you decide to participate and then want to withdraw from the study, you can do that at any time by telling the principle investigator. You do not have to answer any questions that you do not want to. Your employment and interactions with the community will not be affected if you decide not to be in the study.

Questions or concerns: If you have any questions about this study, you can call the Principle Investigator at _____or Mr. Tom Rubaale at the Health Department in Fort Portal at 483-22575

Initial of Researcher_____ Initial of Subject_____

Appendix 4-Consent Form

Title of the Project:
Investigating Adolescent Perceptions of HIV Infection and Pregnancy, Fort Portal, Uganda

Part 1: Researcher Information

Name of Principal Investigator: Sunita Chacko
Affiliation: MSc. Candidate, Public Health Sciences
Contact Information: 780-439-6144

Name of Co-Investigator/Supervisor: Dr. Lory Laing
Affiliation: Professor, Public Health Sciences
Contact Information: 780-492-6211

3 Part 2: Consent of Subject

	Yes	No
Do you understand that you have been asked to be in a research study?		
Have you read and received a copy of the attached information sheet?		
Do you understand the benefits and risks involved in taking part in this research study?		
Have you had an opportunity to ask questions and discuss the study?		
Do you understand that you are free to refuse to participate or withdraw from the study at any time? You do not have to give a reason and it will not affect your care.		
Has the issue of confidentiality been explained to you? Do you understand who will have access to your records/information?		
Do you want the investigator(s) to inform your family doctor that you are participating in this research study? If so, please provide your doctor's name: _____ (This question is optional).		

4 Part 3: Signatures

This study was explained to me by: _____
Date: _____

I agree to take part in this study.
Signature of Research Participant: _____
Printed Name: _____

Witness (if available): _____

Printed Name: _____

I believe that the person signing this form understands what is involved in the study and voluntarily agrees to participate.

Researcher: _____
Printed Name: _____

* A copy of this consent form must be given to the subject.

Appendix 5 Dissemination Acitivites

1. **November 2003**
   Presentation to Basic Health Services Staff of Preliminary Findings and Recommendations
   Basic Health Services Office
   Fort Portal, Uganda

2. **January 2004**
   Presentation and panel discussion on the HIV epidemic in sub Saharan Africa
   University of Alberta International Week
   Edmonton, Alberta, Canada

3. **March 2004**
   Interviewed by local newspaper (Edmonton Journal) in regards to field work, general thoughts and findings
   Edmonton, Alberta, Canada

4. **March 2004**
   Class Presentation and Discussion
   English 403 Class, studying literature dealing with HIV and AIDS
   University of Alberta
   Edmonton, Alberta, Canada

5. **April 2004**
   Wrote news article on research experiences in Uganda, Express News, University Newspaper
   University of Alberta
   Edmonton, Alberta, Canada

6. **May 2004**
   Poster Presentation and participation in Annual Research Day, Department of Public Health Sciences
   University of Alberta
   Edmonton, Alberta, Canada

Future Dissemination will include:

Published articles
Participation in Department of Public Health Science Student Seminars and Research Rounds
Further presentations and possible conference participation